nzbqagen/ihsmanlay

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SYSTEMS OPERATIONS MANUAL

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT INCORPORATING THE NEW ZEALAND IMPORT HEALTH STANDARDS AND AQIS OPERATIONS REQUIREMENTS

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES III

AMENDMENT RECORD VI

GLOSSARY OF TERMS VIII

DEFINITIONS IX

INTRODUCTION 1

SECTION 1. BACKGROUND 1

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements 1

1.2 Scope of the Manual 2

SECTION 2. PEST CATEGORIES 1

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS 1

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS 1

2.1.3 International Phytosanitary Certificate (PIC) Pests - Risk Group 1 - PESTS 2

2.2 Maximum Pest Levels 2

SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS 1

3.1 Country Freedom From Fruit Flies 1

3.2 Area Freedom Districts within Australia 1

3.2.1 Riverina - MIA 3

3.2.2 Sunraysia - Victoria and New South Wales 3

3.2.3 Riverland - South Australia 3

3.2.4 Commodity Registration Requirements 4

3.2.5 Commodity Security - Area Freedom 5

3.2.6 Phytosanitary Certification Endorsements - Area Freedom Treatments 6

3.3 Methyl Bromide Fumigation 8

3.3.1 Fumigation Responsibilities 8

3.3.2 Phytosanitary Certificate Endorsements 11

3.4. Dimethoate Dip/Spray 12

3.4.1 Post Treatment Security - Chemical Dipping/Spraying 14

3.4.2 Post Treatment - Transportation of Product to Export Loading Point 15

3.4.3 Phytosanitary Certificate Endorsements 15

3.5 Cold Storage 17

3.5.1 Approved Cold Storage Disinfestation Treatments 18

3.5.2 Registration 18

3.5.3 Cold Disinfestation Procedures 18

3.5.4 Temperature Recording 19

3.5.5 Record Requirements 19

3.5.6 Auditing Requirements – Cold Storage Disinfestation Centres 21

3.5.7 Phytosanitary Certificate Endorsements 21

3.6 Non Host Status 21

3.6.1 Phytosanitary Certificate Endorsement 22

3.7 Heat Treatments 23

3.8 Dimethoate Dipping - Interim Approved Cucurbits 23

3.8.1 Dimethoate Treatment Centre Requirements 24

3.8.2 Phytosanitary Certificate Endorsements 24

3.9 Methyl Bromide Fumigation - Interim Approved Product 25

3.9.1 Phytosanitary Certificate Endorsement 26
SECTION 4. MANAGEMENT RESPONSIBILITIES 1
4.1 AQIS Canberra Office 1
4.2 State Departments of Agriculture (or equivalents) 2
4.3 AQIS State Offices 2
4.3.1 Registration Requirements 3
4.3.2. Sampling Requirements 4
4.3.2.1 Consignment Line Samples 4
4.3.2.2 Grower Line Samples 4
4.3.3 AQIS Inspection Procedures 5
4.3.4 Rejection Procedures 6
4.3.5 Split Consignment Inspections 6
4.4 Untreated Produce Being Forwarded from Country Areas 7
4.5 AQIS Auditing Requirements 7
4.5.1 AQIS BQA/IHS Audit Requirements 7
4.5.1.1 Grower/Audit Frequency: 7
4.5.1.2 Grower Audits - Certification Assurance Systems 8
4.5.1.3 Audit Requirements/Growers - Suspension Criteria 8
4.5.1.4 Grower Audits - Non Compliance 9
4.6 Audit Requirements/Crop Monitors 9
4.6.1 Crop Monitor Audits/Non Compliance 11
4.7 Audit Requirements/Packinghouses 11
4.7.1 Packinghouse Audits/Non Compliance 12
4.8 Audit Requirements - Treatment Centres 13
4.8.1 Treatment Centre Audits/Non Compliance 13
4.9 Audit Requirements - Exporters 14
4.9.1 Exporter Delegate Audits 14
4.9.2 Exporter/Exporter Delegate - Non Compliance 14
4.9.3 Audits after Product Rejections by AQIS 15
Attachment 1 to Section 4 – AQIS Plant Contact List 16
SECTION 5. GROWER RESPONSIBILITIES 1
5.1 Registration 1
5.2 Responsibilities 1
5.3 Grower Audits 2
5.3.1 Grower Suspensions 2
5.3.2 Grower Audits - Non Compliance 3
5.3.3 Audit Requirements/Crop Monitors 3
5.3.4 Crop Monitor Audits/Non Compliance 4
SECTION 6. PACKINGHOUSE RESPONSIBILITIES 1
6.1 Grower Registration - Commodity Specific 1
6.2 Packinghouse Responsibilities - Commodity Specific 2
6.3 Inspection Requirements 2
6.4 Security and Supervision Responsibilities 3
6.5 Packinghouse Audits 3
6.5.1 Application for Registration 3
6.5.2 Continued Registration 4
6.6 Suspension of Packinghouse Registration 4
SECTION 7. CERTIFICATION ASSURANCE ARRANGEMENTS - PACKINGHOUSE RESPONSIBILITIES 1
7.1 General Requirements 1
7.1.1 Auditing for New Zealand Requirements 2
7.1.2 CA - New Zealand Inspection Requirements 2
7.2 Documentation 4
7.3 Post treatment Security 4
SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES 1
8.1 Registration 1
8.2 Process Controls 1
8.3 BQA Treatments - AQIS Supervision 1
8.3.1 Fumigation Centres 1
8.3.2 Cold Storage Centres 1
8.3.3 Dimethoate Treatments 2
8.4 AQIS Audits of Treatment Centres 2
SECTION 9. EXPORTER RESPONSIBILITIES 1
9.1 Registration Requirements 1
9.2 Exporter Responsibilities 1
9.3 Exporter Inspection 1
9.4 Split Consignment Inspections 2

9.5 Untreated Produce being forwarded from Country Areas *3*
9.6 Delegation of Inspection *3*
9.7 Documentation *3*
9.8 Procedures for Exporter Rejected Produce *4*
9.9 Post treatment Security *4*
9.10 Security of Produce - Exporter/Freight Forwarder Premises *5*
9.11 Audits - Exporters *5*
9.12 Audits -Exporters Delegate *5*
9.13 Exporter/Exporter Delegate - Non Compliance *5*
SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES **1**
10.1 Fruit Fly Area Freedom - Management Requirements *1*
10.1.1 Area Freedom - Fruit Flies 1
10.1.2 Validation of Area Freedom 1
10.1.3 Outbreak 2
10.2 Trapping *2*
SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS **1**
11.1 Redback Spiders - Lactrodectus hasselti *1*

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES **1**

AVOCADO **1**
BANANA **8**
CITRUS **14**
GRAPE **21**
MANGO **25**
PAPAYA **28**
PINEAPPLE **31**
POMEGRANATE **36**
STRAWBERRY **39**
TOMATO **44**

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY **1**

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT **1**
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT **9**
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA **17**

APPENDIX 3 FORMS **1**

3.1 APPLICATION FOR GROWER REGISTRATION **1**
3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION **2**
3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION **3**
3.4 INSPECTION RECORD **5**
3.5 FUMIGATION RECORD **6**
3.6 COLD DISINFESTATION RECORD **8**
3.7 WITHDRAWAL NOTICE **9**
3.8 SUSPENSION NOTICE **10**
3.9 DECLARATION OF DIMETHOATE TREATMENT **11**
3.10 TOMATO VARIETY DECLARATION **12**
3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES **13**
3.12 CONTAINER HYGIENE REPORT **15**
3.13 STATUTORY DECLARATION **16**
3.14 AVOCADO GROWER DECLARATION **17**

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AQIS Brisbane Office Senior Inspector Exports Attn [redacted]	Locked Mail Bag 1700 Spring Hill Queensland 4004	4
AQIS Brisbane Office State Contact Officer (C/A) Attn [redacted]	Locked Mail Bag 1700 Spring Hill Queensland 4004	5
AQIS Sydney Office Senior Export Inspector Attn [redacted]	Export/Import Branch PO Box 657 Mascot 2020	6
AQIS Sydney Office State Contact Officer (C/A) Attn [redacted]	Export/Import Branch PO Box 657 Mascot 2020 NSW	7
AQIS Melbourne Office Senior Export Inspector Attn [redacted]	PO Box 60 World Trade Centre Melbourne 3005	8
AQIS Melbourne Office State Contact Officer (C/A) Attn [redacted]	PO Box 60 World Trade Centre Melbourne 3005	9
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Dept of Agriculture W. Aust Senior Export Officer Attn [redacted]	PO Box 1410 Canning Vale 6155	12
Dept of Agriculture W.Aust State Contact Officer Attn [redacted]	PO Box 1410 Canning Vale 6155	13

Dept of Agriculture N.T Attn [redacted]	PO Box 2268 Darwin 0801	14
Dept of Agriculture Tasmania Attn [redacted]	Macquarie Wharf No 1 Hobart 7000	15
Dept of Agriculture Tasmania State Contact Officer Attn [redacted]	Macquarie wharf No. 1 Hobart 7000	16
Ministry of Agriculture and Forestry Import Compliance Officer Attn [redacted]	PO Box 2526 Wellington New Zealand	17
Plant Quarantine Policy Branch	AQIS Canberra Office	18
AQIS Mildura Office Attn	PO Box 2756 Mildura 3500 Vic	19
AQIS Griffith Office Attn	104 - 110 Banna Avenue Griffith NSW 2680	20
AQIS Bundaberg Office Attn	PO Box 815 Bundaberg4670	21
AQIS Nth Queensland Office Attn	PO Box 96 Cairns 4870	22
AQIS Townsville Office Attn	Townsville	23
AQIS Riverland Office Attn	PO Box 411 Loxton SA 5333	24
Victorian Department of Agriculture Attn [redacted]	Private Mail Bag 15 South Eastern Mail Centre 3176	25
New South Wales Agriculture Attn [redacted]	Locked Bag 21 Orange NSW	26
Primary Industries South Australia Attn [redacted]	GPO Box 1671 Adelaide	27
Queensland Department of Primary Industries Attn [redacted]	GPO Box 46 Brisbane QLD 4001	28

AQIS State Offices and State Departments of Agriculture will make up additional 'Official Distribution Lists' for their own requirements which may include industry bodies, exporters and

packinghouse/growers. AQIS Offices and State Departments of Agriculture must implement procedures to record distribution lists and for the issue of controlled copies of this Manual and for amendments to this manual to those nominated on distribution lists.

AMENDMENT RECORD

Amendments to this Manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

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GLOSSARY OF TERMS

AFFA	Agriculture, Fisheries and Forests of Australia
ANVAS	Avocado Nursery Voluntary Accreditation Scheme
APPB	Animal and Plant Programs Branch (AQIS Canberra)
AQIS	Australian Quarantine and Inspection Service
BQA	Bilateral Quarantine Arrangement
CA	Certification Assurance
EC (FF+V) O's	Export Control (Fresh Fruit and Vegetable) Orders
EDB	Ethylene Dibromide
IHS	Import Health Standards (New Zealand)
ISO	International Standards Organisation
MAF	Ministry of Agriculture and Forestry (New Zealand)
MAP	Maximum Allowable Prevalence
MB	Methyl Bromide
QC	Quality Control
SBV	Sun Blotch Viroid (Avocado)
SI(E)	Senior Inspector (Exports)

DEFINITIONS

AQIS Inspection Lots	An inspection lot is any number of packages from one packer/exporter of the same BQA commodity presented for inspection at one time. Lines are rejected/accepted for export based on this inspection. This includes lines presented for inspection that will be subsequently split into separate consignments for export to several destinations in New Zealand.
Commodity	All species/varieties of produce which come under the one genus of plants and are treated by the same disinfestation treatment, are to be considered as one commodity. (i.e. rockmelons and zucchini are one commodity under the cucurbit group of plants - mandarins and lemons are one commodity under citrus).
Defect	Any unit of produce that is infested with critical and/or quarantine pests.
End Point Inspection	Product inspection carried out on an individual grower line basis following disinfestation treatments being undertaken. Lines are rejected/accepted for AQIS inspection based on the results.
Grower Line Consignments	A consignment consisting of only one BQA crop and from one grower.
Homogeneous	An identifiable lot of produce which has been produced in accordance with the directions in this Manual resulting in uniformity of treatment.
In - Line Inspection	A process where a packinghouse under AQIS Approved Certification Assurance (CA) Arrangements, has defined a sampling and inspection method, that meets the appropriate sampling plan required in this Manual, over a period of time during the packing process.
Interim Approval	Approval for a disinfestation treatment system which has been accepted in principal by MAF but not ratified as an approved treatment system pending additional research being concluded and accepted by MAF. Any commodity which has an "interim approved" arrangement, will if live fruit fly is found during on-arrival inspection in New Zealand, be suspended from export to New Zealand immediately.
Line	A group of produce that is homogeneous.
Mixed Line Consignments	A consignment, covered by a single phytosanitary certificate for one commodity but from more than one grower.

Monitoring	The actions undertaken to detect the presence of fruit fly or other Risk Group 2 pest/contaminant in the orchard area and/or to meet New Zealand's fruit fly area freedom specifications.
Pathway	A documented series of activities that, when carried out according to approved procedures, form a discrete and traceable system, from the grower to export loading point.
Phytosanitary Certificate	The certificate signed by an AQIS Inspector in accordance with the International Plant Protection Convention verifying that produce has been produced in accordance with the Australia - New Zealand BQA and the directions of this Manual and appropriately endorsed.
Risk Group 3 Pest	Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic effects on their production and/or environment (some importing countries prohibit the entryof the host commodity). An offical surveillance system is required for such pests in New Zealand.
Risk Group 2 Pest	Risk Group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.
Risk Group 1 Pest	Risk Group 1 pests are those regulated pests which on introduction into New Zealand could cause unaceptable economic impacts on the production of a commodity/commodities and/or the environment.
Secure Package	Any approved method that will minimise the risk of cross contamination, re-infestation or substitution of produce destined for New Zealand after it has been inspected and/or treated, to ensure it meets the New Zealand entry requirements.
Trade Samples	Are fruits which are being forwarded for market appraisal, packaging methods or other types of research work being investigated on a commercial scale by importers/exporters involved directly in the Australia - New Zealand trade.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a cluster).

INTRODUCTION

SECTION 1. BACKGROUND

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements

The BQA is a formal agreement between the Australian Quarantine Inspection Service (AQIS) and the New Zealand Ministry of Agriculture and Forestries (MAF), to ensure New Zealands' pre-export requirements are documented. This is to ensure all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The previous BQA had 15 appendices which related to each commodity being exported. For example Appendix 2 related to pome fruits and included responsibilities that must be followed by AQIS before certifying apples or pears for export to New Zealand.

AQIS/MAF have amended the BQA to include a series of appendices that describe the requirements for a particular treatment for fruit fly host material. This new BQA structure incorporates recent developments in relation to the documentationof New Zealand import health standards (IHS) on a commodity by commodity basis.

The major change which occurs between the "old" and the "new" import systems is that under the "old" BQA, MAF imposed a tolerance of 5 live eggs/larvae of fruit flies in one million units of produce. To meet that fruit fly tolerance, operational systems had to include additional grower and packer responsibilities to ensure that a very low level of infested material would be presented to AQIS for export inspection. With the incorporation of the new IHS and BQA systems, New Zealand have reviewed the tolerance levels for fruit flies and now consider, disinfestation treatments that provide 32 insect survivors in one million treated insects (Probit 9 treatments), is now adequate security for their import Standards..

All approved fruit fly disinfestation treatments as listed in this Manual, meet the required New Zealand disinfestation standards. Any new disinfestation treatments that industry may require to be investigated (particularly heat treatments), will need to meet the efficacy requirements of the New Zealand IHS systems.

The resultant change in emphasis by MAF means that the previous stringent grower and packer requirements are no longer mandatory for all treatment pathways* where an approved disinfestation treatment is applied. However, packinghouses who have some responsibilities delegated to them through treatments and exporter inspection arrangements, will still have responsibilities to fulfil to ensure New Zealand quarantine requirements are met. There will be much more emphasis placed on treatment centres, treatment centre operators, post treatment security and exporter requirements than was previously required.

**NOTE Growers of some commodities will still be required to undertake specific responsibilities where there are pests which are categorised as Quarantine Risk Group 2 and need field control programs as a treatment management option for this category of pest. For further information see Grower Responsibilities Section 5 of this Manual.*

Specific Changes to the BQA

Under the new BQA/IHS framework, AQIS/MAF have changed the emphasis of the appendices from commodities to treatment pathways. This means that there are no longer mandatory requirements for many commodities, to document and undertake pre-treatment activities.

Procedures which may no longer be compulsory under the new BQA/IHS framework include;

. grower registration - (monitoring and spray diaries - unless specific controls are required for defined Quarantine Risk Group 2 pests).
. packer registration - (unless packer is packing defined Quarantine Risk Group 2 pest commodities, or is undertaking approved treatments of produce, or inspecting produce under exporter delegation).

NOTE Grower and/or packer registration may still be required where traceback to the "treatment" includes pest free production area or non-host status treatment with special requirements (e.g. designated non-host status by variety).

The new BQA/IHS and the requirements of this Manual concentrate on the documented responsibilities of treatment of produce through to the export of the commodities, including security of the system once treatment has been undertaken and inspection procedures which must be undertaken to ensure accurate phytosanitary certification and consignment homogeneity.

For most fruit fly host commodities it will only be necessary to have an auditable system from the treatment operator and/or treatment facility, including post-treatment security procedures until the product is loaded for export shipping, which will safeguard against possible product reinfestation or substitution.

However, for some commodities where Quarantine Risk Group 2 (RG2) pests are associated with the commodity being packed, an auditable system must be in place from grower through to export loading - as was the case under the "old" BQA systems.

1.2 Scope of the Manual

This Operational Manual is designed to ensure;

. only approved fruit fly host commodities are exported to New Zealand,
. homogeneity of fruit fly host produce consignments,
. approved treatments for fruit fly host produce are used,
. required levels and intensity of inspection of fruit fly host produce are maintained,
. security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce,
. records traceback to grower/packer/treatment centre - (as appropriate),
. accurate phytosanitary certification is made in accordance with New Zealand requirements.

The systems will be subject to random audits by the Canberra Office and all BQA/IHS systems may be audited by New Zealand MAF at frequent intervals. The purpose of such audits will be to establish that the terms and conditions of the BQA/IHS are being met via the procedures agreed to and documented in this Manual and will include measurement of pathway compliance from growers (where required) through to final export container loading and all associated documentation.

It is recommended that AQIS State Offices and State Departments of Agriculture (or equivalents), should also conduct management audits of the systems to ensure the State responsibilities are being adequately performed and recorded.

This Manual gives instructions for audit procedures and maintenance of records which will be the responsibilities of AQIS State Offices and where applicable State Departments of Agriculture or their equivalents (where these States still retain independent export inspection regimes), to implement and to take required corrective actions when non-conformities are identified.

The commodities and approved treatments that apply to fruit fly host produce are as follows;

	Commodity	**Treatments**	**Special Conditions**
.	Tomatoes	Dimethoate - Area Freedom	Grower Registration
.	Cucurbits	Dimethoate - Approved treatment	Nil
		Dimethoate - Unapproved "	Grower Registration
		Fumigation - Unapproved "	Grower Registration
		Area Freedom	Nil
.	Capsicum	Dimethoate - Area Freedom	Grower Registration
.	Grapes	Cold Storage - Area Freedom	Grower Registration
.	Pomegranate	Area Freedom	Nil
.	Pineapple	Non-Host	Nil
.	Strawberry	Fumigation - Area Freedom	Nil
.	Avocado	Cold Storage	Grower Registration
.	Citrus	Cold Storage - Area Freedom	Nil

NOTE All produce intended for export to New Zealand, whether grower registration is required or not, must be labelled with grower numbers and packinghouse numbers so that traceability can be undertaken back to growers properties.

SECTION 2. PEST CATEGORIES

MAF have made some alterations to the previous pest lists that have been used in conjunction with BQA products. Some of these changes include amendment to pest classifications or categories. Industry and AQIS inspection staff should compare the new pest lists for each commodity as listed at Appendix 1 of this Manual to become familiar with the new listings. Pest Lists are commodity specific and include reference to pests which are regarded as non-quarantine pests to enable additional direction to be given to inspection requirements.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Any pest detected which is not presently included in the Pest Lists **must** be reported to the Canberra Office immediately so that advice and categorisation can be made with MAF New Zealand. The consignment must held until a categorisation of the pest is made.

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS

Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic effects on their production and/or environment (some importing countries prohibit the entry of the host commodity). An offical surveillance system is required for such pests in New Zealand.

Risk Group 3 pests require approved disinfestation treatments to be undertaken in Australia and the establishment of operational systems which document the procedures which will be undertaken to ensure AQIS phytosanitary certification is meaningful and auditable by MAF.

The action taken by MAF should interception of Risk Group 3 pests be detected on arrival in New Zealand will be to reship or destroy the offending consignment and to immediately suspend the export treatment pathway. eg. if an offending consignment is associated with dimethoate treatment, all dimethoate treatments would be suspended (not just the offending commodity), until an AQIS audit/investigation was completed and results accepted by New Zealand.

The same rule applies to area freedom or non-host status treatment pathways.

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS

Risk Group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.

These pests/contaminants will require an Additional Declaration for Risk Group 2 pests on the phytosanitary certificate. The Additional Declaration will certify that some form of management

practice (ie. a pest control program in the field), has been carried out to ensure the consignment is free from the pest/contaminant of concern.

The action taken by MAF on interception of live Risk Group 2 pests will be to reship or destroy the offending consignment and immediately advise AQIS of the non conformance. There will be no suspension of trade invoked for Risk Group 2 pests although AQIS will usually conduct a follow up audit to determine the cause of the system failure and to implement corrective action where possible.

The commodities which require Additional Declarations for Risk Group 2 pests/diseases on the phytosanitary certificate are;

tablegrapes,	weedseeds* and redback spiders
capsicums,	weedseeds*
avocado.	Cercospora spot blotch (CSB) and Sun blotch viroid (SBV)

* Weedseeds are categorised by New Zealand as Regulated non plant pests/unwanted organisms however as there are no approved disinfestation treatments which can be undertaken in New Zealand for this category of pest, this Manual includes weedseeds as RG2 pests to simplify the document.

2.1.3 International Phytosanitary Certificate (PIC) Pests - Risk Group 1 - PESTS

Risk Group 1 pests are those regulated pests which on introduction into New Zealand could cause unaceptable economic impacts on the production of a commodity/commodities and/or the environment.

The action taken by MAF on interception of live Risk Group 1 pests will be to allow the consignment to be treated if an approved treatment is available or alternatively, the consignment will be reshipped or destroyed.

Should during exporter/exporter delegate inspections, Risk Group 1 pests be detected, the consignment must be rejected and subject to corrective action before being presented for AQIS inspection.

In accordance with International Plant Protection Convention (IPPC) rules for the issuance of phytosanitary certificates, should any live Risk Group 1 pest be detected during AQIS inspection, the consignment must be rejected and subject to corrective action (reprocessing, withdrawal of offending grower etc.), before being resubmitted for further inspection and certification.

2.2 Maximum Pest Levels

The inspection tolerance Table 1 as below ensures a 95% confidence that the given Maximum Allowable Pests (MAP) will not be exceeded for any category.

A 450 unit sample will only be permitted where the consignment contains less than 1000 units of fruit/vegetables.

A selected sample size must be nominated by the exporter or exporter delegate prior to any inspection being undertaken. Once a sample number has been selected it cannot be varied and must then be used for all inspections covering that line/consignment. ie. The AQIS and MAF on-arrival inspections will all be conducted at the nominated sample size rate.

TABLE 1
INSPECTION TOLERANCE TABLE
SAMPLE SIZES - PEST TOLERANCE LEVELS

Pest Category	450 Samples	600 Samples	950 Samples	1250 Samples
Risk Group 3	Nil	Nil	Nil	Nil
Risk Group 2	Nil	Nil	Nil	Nil
Risk Group 1	Nil	Nil	Less than 2 units	Less than 3 units

Pests listed as Non-regulated (non - quarantine) pests at Appendix 1 of this Manual, have an unlimited tolerance during inspection. These pests are regarded as non-quarantine pests between Australia and New Zealand.

NOTE

If a pest is found during inspection of produce for the BQA program that cannot be readily identified, it must be categorised as a Risk Group 2 pest until it is identified and the category becomes known. The offending consignment must be held until a categorisation is made.

SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS

3.1 Country Freedom From Fruit Flies

PEST FREE AREAS (BASED ON NASS STANDARD 158.03.07) ARE KNOWN AS APPENDIX 1 TO THE BQA/IHS

Appendix 1 to the BQA/IHS refers to fruit flies that are considered to be exotic to Australia and which are not established here. e.g. *Bactrocera cucurbitae* (melon fly).

Through the Australian surveillance and monitoring program, managed by the Plant Protection Office within AQIS, exotic fruit flies trapping and monitoring regimes which are conducted at all international ports (air and sea), Australia can claim and New Zealand will accept whole of Australia freedom from exotic fruit flies.

The air and sea ports that are included in the trapping and monitoring regimes are listed below;

Northern Territory

Darwin	Gove	Groote

Queensland

Brisbane	Bundaberg	Cairns
Gladstone	Karumba	Mackay
Mourilyan Harbour	Thursday Island	Townsville
Weipa		

New South Wales

Coffs Harbour	Newcastle	Sydney
Wollongong	Yamba	

Victoria

Geelong	Melbourne/Westerport	Protland

South Australia

Adelaide	Ceduna	Port Augusta
Port Lincoln	Port Pirie	Whyalla

Western Australia

Albany	Broome	Bunbury
Carnavon	Dampier	Derby
Esperance	Geraldton	Karratha
Perth/Freemantle	Port Hedland	Wyndha

Tasmania

Deveonport/Burnie	Hobart	Launceston

3.2 Area Freedom Districts within Australia

PEST FREE AREAS (BASED ON NASS STANDARD 158. 03. 06) ARE KNOWN AS APPENDIX 2 TO THE BQA/IHS

The fruit flies that are referred to at Appendix 2 to the BQA are those fruit flies which are endemic in Australia but for which various districts have, through trapping and monitoring programs, been able to establish area freedom from those flies. eg Bactrocera tryoni.

Area freedom from fruit flies is considered as an approved treatment for those areas where approved trapping regimes are in place in accordance with the minimum Standards as covered by the Australian Code of Practice for the Management and Control of Queensland Fruit Fly and where equivalent permanent trapping regimes are in place for Mediterranean fruit fly and Oriental species of fruit fly as stipulated in the New Zealand NASS Standard 158.03.06 and NASS Standard 158.03.07.

Should a fruit fly of any species (either alive or dead), be found during AQIS or Exporter inspections in Australia, AQIS will inform the State Department of Agriculture responsible for the Region supplying that fruit, of the detection and will suspend area freedom certification (for New Zealand and all other markets), until the cause of the find can be determined.

Should a fruit fly of any species (either alive or dead), be found during New Zealand MAF on-arrival inspections, it will mean the suspension of all area freedom certification from all districts of Australia until an AQIS audit can be undertaken to determine the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on the results of the AQIS audit.

The districts of Riverland (including the Riverland extension area and Mypolonga), and Riverina have been approved by MAF under specific management criteria (New Zealand NASS Standard 158.03.06), whereby, in the event of a fruit fly outbreak (2 flies detected with 400 metres within 14 days), the affected suspension zone area is a 15kms radius from the outbreak site, which applies for a period of one generation plus 28 days following the last fly caught.

NOTE: Should as a result of detection surveys, there be a situation where 2 outbreak sites are found between 1 - 3 kms apart, a 30 kms outbreak zone will be applied from a mid-distance between the outbreak sites. Where detections reveal two outbreak sites in excess of 3 kms apart, two 15 kms radii circles will be applied to each outbrek site.

The district of Sunraysia covering parts of New South Wales and Victoria, is subject to a 80km suspension zone and three generation time period however, a management plan application has been made to MAF seeking alignment with the Riverland and Riverina districts but has yet to be approved.

Should any another fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

State Departments of Agriculture (or their equivalents), must report all fruit fly finds (including single fly detections), from the fruit fly area freedom zones to AQIS Canberra Office within 2 days of detection and identification. This information shall be passed onto MAF New Zealand at the earliest opportunity thereafter.

The following districts are recognised as being considered free of all species of fruit fly as determined by trapping surveys and monitoring data forwarded by AQIS to MAF and accepted by MAF as meeting their requirements under NASS Standards 158.03.06.

3.2.1 Riverina - MIA

The area covers the horticulture growing districts along the Murrumbidgee River (and includes the township of Hillston on the Lachlan River), and includes (but not exclusive) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrrandera and Darlington Point and the towns which are located between the above nominated towns.

Area (b) is the Hillston District.

Area (c) is the Menindee District.

3.2.2 Sunraysia - Victoria and New South Wales

The area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems and includes (but not exclusive) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and other areas around and between these towns.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and other areas within these towns.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and other areas within these towns.

3.2.3 Riverland - South Australia

The area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships (including but not exclusive of), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri, Barmera, Waikerie and other areas within these towns.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat, Swan Reach including the towns in between and includes the Shire of Mildura.

Area (i) the Mypolonga township surrounds.

NOTE

In the event that "Area Freedom" is suspended within any of the above defined regions at any time, packinghouses who intend to pack both "area free fruits" and "suspension zone fruits" must develop written procedures to show how fruits from each area will be identified, segregated, processed, stored and documented. Fruits from "area free" and those needing physical or chemical

treatments must be shipped as separate consignments and cannot be co-joined.

3.2.4 Commodity Registration Requirements

Where a treatment is based on sourcing host material from a pest free area, the consignment must be directly traceable to that area. AQIS requires that grower numbers must form part of the trade description requirements and will form an additional traceback mechanism should such be required.

Where a treatment is a post harvest disinfestation treatment, the consignment must be traceable to the approved treatment facility and the unique treatment batch. AQIS however requires that grower numbers are part of the trade description requirements and will form additional traceback mechanisms should such be required.

Whilst grower registration may not be mandatory, all packinghouses must provide a list of growers names, addresses and allocated grower numbers for all produce that is being packed for the New Zealand market.

In the event that presently accepted fruit fly area freedom districts, fruit fly suspension zones are required, packinghouses must provide lists of growers who are in the deaclared quarantine suspension zones and a list of growers who remain in the area freedom districts surrounding an outbreak site.

TABLE 2
APPENDIX 1 TO THE BQA/IHS
AREA FREEDOM FROM FRUIT FLIES
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Capsicum	Yes	Yes	Yes	Approved State Dept Surveys	Yes
Citrus	No	Yes - Queensland	Yes	"	Yes
Tablegrapes	Yes	Yes	Yes	"	Yes
Avocado	Yes	Yes	Yes	"	Yes
All other commodities	Not required	Not required	Not required	"	Yes

Regardless of grower/packinghouse registration requirements, each package of produce destined for New Zealand will contain the grower number or equivalent recognised code, packinghouse number and exporters name and address.

Capsicum and tablegrape growers must register under the New Zealand program because of weedseed problems which are associated with the two commodities.

Tablegrapes are also subject to mandatory treatment for redback spiders. For fumigation specifications, see Section 11 of this Manual and for information regarding fumigators responsibilities see Section 3 of this Manual.

Avocado growers must register due to Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV) and citrus growers for citrus leaf miner which is categorised as a Quarantine Risk Group 2 pests for New Zealand.

Citrus growers in Queensland must be registered for field treatment requirements for the control of *Guignardia citricarpa* - Citrus black spot. Field treatments as recommended for the Australian - Japanese citrus program are acceptable and grower records must be kept for all controls that are being implemented. As citrus black spot is being surveyed for in other States, no grower monitoring or control programs need to be undertaken. **An additional declaration for this pest/disease must be made for all citrus consignments.**

Growers of other commodities under area freedom certification will not need to be formally registered for the New Zealand BQA.

3.2.5 Commodity Security - Area Freedom

All product being moved from a an area freedom from fruit flies district, which is to be loaded for export outside that district, must be fully secured at all times.

Approved security measures for transporting of produce will include either;

. fully shrinkwrapping of each pallet of produce,

. fully enclosing each pallet with shademesh cloth with a maximum aperture of 1.6mm. including the surface area between the bottom row of cartons and the actual pallet.,
. loading direct into panotech vans with units sealed by AQIS officers.

All consignments shipped out of Area Freedom Districts will be covered by either an AQIS EX 186 Transfer Certificate or EX28 Notice of Intention to Export Certificate issued by the despatching AQIS office. Each consignment must be inspected on arrival in the receiving district by AQIS officers in that region to verify security of the consignment/s are intact.

Should inspecting officers find that the security of the consignment/s have been breached during transporting, the consignments must be rejected for area freedom certification however, the rejected produce may be allowed disinfestation treatments as directed in this Manual as corrective action should the exporter chose this option.

3.2.6 Phytosanitary Certification Endorsements - Area Freedom Treatments

General Endorsement - 1

"The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia".

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

Specific Endorsements - Avocado

"The fruit in this consignment has been sourced from growers and blocks registered with the ANVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV)" and

"The fruit in this consignment has undergone a field control program for management and control of Cercospora Spot Blotch (CSB)".

Specific Endorsement - Tablegrapes

"The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti (*Australian redback spider*)".*

"The grapes in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand".

Specific Endorsement - Citrus Fruits

"The citrus in this consignment has undergone a disease control program that ensures freedom from *Guignardia citricarpa* - Citrus black spot".

3.3 Methyl Bromide Fumigation

METHYL BROMIDE FUMIGATION IS KNOWN AS APPENDIX 3 TO THE BQA/IHS AND APPLIES ONLY TO STRAWBERRIES.

Methyl bromide fumigation is an **approved treatment for strawberry fruits**. All fumigation must be performed by licensed fumigators and within AQIS/State Departments approved treatment centres.
All fumigations must be undertaken in accordance with AQIS Fumigation Standard.

For the purposes of this Manual, **watermelon** fumigation requirements are listed in this Section of the Manual although watermelon fumigation with methyl bromide is only an "interim approved" treatment at this time.

All exports of **watermelon** must be referred to in export documentation as **Appendix 9 to the BQA.** and additional responsibilities and requirements are located at Section 3.9 of this Manual.

Fumigation treatment requirements are as detailed in Table 4 below;

TABLE 4
METHYL BROMIDE FUMIGATION
TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21.0 - 26°C and above	32g/m3	Watermelon - 4 hours
15°C and above	48g/m3	Strawberry - 3 hours

All fumigations must be performed with the amount of product space equal to less than 50% of total air space within the chamber or tents.

Should live fruit fly be found during AQIS or Exporter inspections following treatment, the fumigation centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the methyl bromide treatment pathway will be suspended immediately for all Australian products, until an AQIS audit can be undertaken to determine the reasons for such failure.

3.3.1 Fumigation Responsibilities

All fumigation treatment centres requiring to be involved in the New Zealand BQA/IHS trade must be registered with AQIS for this purpose.

In addition to normal AQIS registration requirements that pertain to fumigation centres, the following additional requirements must be in place before registration for New Zealand BQA/IHS will be permitted.

All BQA/IHS produce which is required to be fumigated must be undertaken in accordance with the following process controls. Fumigation treatment centres must be able to demonstrate at all times that the following requirements are being met;

1. Incoming product identification.
2. Segregation from other produce and clearly marked "New Zealand"
3. The treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment. ie Treatment batch numbers relating to incoming consignments or equivalent recording system will be required.
4. Documented treatment records
5. How measuring equipment is calibrated and how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated products.
8. Supervision and security arrangements at loading.
9. If required, maintenance of inspection facilities on the premises.

In accordance with the above requirements, fumigation treatment facilities must develop a set of procedures which clearly define the responsibilities and work duties of all staff involved in the fumigation of watermelons or strawberries.

It is recommended that fumigation establishments write procedures for each of the above requirements detailing whom is responsible for the activity (it can be more than one person as long as all persons know their duties in each category), when the activity is done, what records are made and where these records will be filed.

With regard to Item 3 above, it is recommended that individual procedures accompanied by work instructions be written to define the processes and controls on the processes. The following criteria should be considered;

- within process control, mention must be made as to how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent, and

  .. define how the product will be equally spread through out the chamber/tent to enable free fumigant flow throughout the stack.

- how many fruits will be sampled to measure lowest flesh temperature of product,

- if tent fumigation is being performed, by whom and when, is the tent checked for holes/tears?

- who, how and when, is temperature measuring equipment calibrated. How is this recorded?

- where are in-process gas monitoring lines located within the stack for verification of fumigant dose rates, who is responsible for reading and recording this information,

- who calculates and who checks required fumigation dosage rate once temperature and volume are calculated?

- How is it established that circulation fans within the unit are working prior to fumigant being entered into the chamber/tent,

- Who is responsible, who checks that the correct amount of fumigant is entered into the chamber/tent?

- What procedures are applied to ensure no leaks of chamber or tent are evident,

- what period of time after initial fumigant is released into the chamber/tent will verification readings be made, using what type of equipment,

- calibration of gas measuring equipment is undertaken how frequently and who does this. Calibration details are recorded where?

- at completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file,

- who has the authority to sign off the treatment certificates to enable release of produce.

- how is treated product identified as being treated?

All processes undertaken by fumigation treatment centres for the New Zealand trade should have written procedures and the system should be such, that it can always be subject to audits.

All fumigations which are undertaken using flexible tent capacities will be subject to AQIS supervision and monitoring procedures to ensure that the requirements as directed above are being undertaken effectively. Fumigations performed in fixed capacity chambers or tents will be monitored by AQIS at frequent intervals during the fumigation season.

It is recommended that treatment centres when making application for registration for the New Zealand trade, submit a process control procedures manual for AQIS assessment so that registration and process controls can be assessed and approved simultaneously.

Growers and packinghouses associated with strawberry production and packaging do not need to be formally registered for the New Zealand export program as there are no Quarantine Risk Group 2 pests which need field control programs.

Not withstanding the above paragraph each package of fumigation treated produce will be clearly marked with grower number, packinghouse number and exporters name and address.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on

Transfer Certificate (EX 186) or Notice of Intention to Export/Export Permit (EX 28) and signed off by an AQIS approved officer.

NOTE Senior Inspectors (Exports) may approve variations to the above documentation requirements to suit own State operating requirements and the use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is to be used, it is recommended that audits of such systems be undertaken frequently enough to enable confidence within the systems.

3.3.2 Phytosanitary Certificate Endorsements

General Endorsement - 1

"The strawberries have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia".

and

General Endorsement - 2

"The fresh strawberries covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

3.4. Dimethoate Dip/Spray

DIMETHOATE DIPPING OR SPRAYING IS KNOWN AS APPENDIX 4 TO THE BQA/IHS

The application of dimethoate dips/sprays is an **approved treatment for tomatoes, capsicums, rockmelon and zucchini fruits/vegetables.**

Note ***Honeydew melons, cucumber, scallopini do not have an approved dimethoate treatment and reference must be made to Section 3.8 of this Manual for specifications that relate to these products.***

Where growers are supplying commodities that do not have Quarantine Risk Group 2 pests listed, those growers do not need to be registered for the purpose of this Manual.

Growers of commodities where Quarantine Risk Group 2 pests are listed will need to be registered by AQIS and such growers must maintain spray and monitoring diaries that demonstrate appropriate field control measures for those pests listed at Risk Group 2.

TABLE 5

DIMETHOATE DIPPING/SPRAYING
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Capsicum	Yes	Yes	Yes	Yes	Yes
Tomato	Yes	Not required	Yes	Yes	Yes
Rockmelon	Not required	Not required	Not required	Yes	Yes
Zucchini	Not required	Not required	Not required	Yes	Yes

Should live fruit fly be found during AQIS or exporter inspections following treatment, the dipping treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the dimethoate treatment pathway will be suspended immediately for all Australian products, until an AQIS audit can be undertaken to determine the reasons for such failure.

Capsicum growers must be registered to undertake required field control programs for weedseeds which are categorised as Regulated non plant pests/unwanted organisms by New Zealand and determined by AQIS to be equivalent to Quarantine Risk Group 2 pests and which are a recognised entry pathway associated with this commodity.

Tomato growers must be registered for the BQA/IHS due to the specific varieties of tomatoes which are permitted to be treated with dimethoate. Growers must sign declarations for each consignment of tomatoes delivered to registered packinghouses nominating the variety of tomatoes contained in that consignment.

Tomato packinghouses are not permitted to pack/treat tomatoes for New Zealand unless they have grower declaration forms and that the tomatoes are one of the five approved varieties permitted dimethoate treatments.

The five permitted varieties of tomatoes are; Floradade, Sunny, Duke, Hayslip and Tristar.

Not withstanding that growers and packinghouses (rockmelon and zucchini), may not need to be specifically registered for the New Zealand program each package of produce treated under this Section of the Manual, will contain details of the grower number, packinghouse number and exporters name and address.

The required dimethoate treatments for the above products are;

- for tomato, capsicum, rockmelon and zucchini;-

  .. 400 ppm spray or dip applied to each fruit for 1 minute. (a tolerance in measurement of ±6% or ±24 ppm is permitted).

NOTE - The application of dimethoate for capsicums must be undertaken as a spray system and not a dipping regime.

Treatment centres using dimethoate sprays/dips for New Zealand produce must be registered with AQIS for this purpose. It is recommended that treatment centres when applying for registration should present a procedures manual detailing how their process controls will be implemented. The details of process controls that must be in place are as follows;

. that purchase of bulk chemical be from fresh stocks and certainly made from stock which is not older than 18 months,

. how chemical is be stored at temperatures below 40°C, as it has been determined that at temperatures above 46°C (for even 1 day), the active ingredient will degrade and solution strength will be lessened.

. the use of oils or waxes during the preparation of product prior to the chemical dipping treatment is prohibited.

. all product being treated with chemical dip will be free of soil.

. the chemical dipping process must be the last preparation process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted, following dip treatment.

. the packinghouse/treatment centre will nominate a person/s to undertake the making up of dimethoate solutions and the recording of each consignment or batch lot that is treated and packed for New Zealand,

- the nominated person/s must satisfy an AQIS authorised officer/inspector they are able to correctly determine the make up of chemical solution strengths, before a packinghouse/treatment centre will be permitted by AQIS, to chemically dip/treat fruits destined for the New Zealand market.

. the packinghouse/treatment centre will make up chemical solutions immediately prior to use and will have systems in place for recording solution strengths. The packinghouse or treatment centre will also record details of the mixing of the solution and any topping up of the solution during processing which allows for chemical wash out. Details will include the times and indicate volumes of product treated at the time of topping up.

. each treatment operator will be required to document their method/s of dipping and will include:

- size of the dip tank,

- method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc),

- maximum volume of water required for any/each treatment,

- amount of chemical required to achieve the required ppm level active ingredient,

- minimum allowable solution level,

- maintenance of active ingredient level (i.e. "top up" levels).

. treatment operators will have an identification system in place which must identify treated products from untreated products and these must be placed on pallets/bins/crates etc in a clear reasonably permanent manner.

. after dipping as many packages/crates as possible, must be marked/identified as being "treated".

NOTE When the processing of any batch is completed, the solution will be completely disposed of. Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems which demonstratively prove that they are able to carry over solutions to a following day without losing effectiveness of the chemical solution.

3.4.1 Post Treatment Security - Chemical Dipping/Spraying

Immediately following labelling of packaging, produce must be either:

. shrink-wrapped and sealed as a palletised unit, or

. shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom, or

. Coolstored unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product, or

. Coolstored protected in secure packages.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the State of operation for assessment and approval.

3.4.2 Post Treatment - Transportation of Product to Export Loading Point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on treatment centre premises.

. supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.

. documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.

. the nominated person can be either the exporters delegate or the operator of the treatment establishment.

. the exporter or the exporters delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.

. the exporter or the exporters delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,

    . if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce of the untreated produce must be properly secured.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.4.3 Phytosanitary Certificate Endorsements

General Endorsement - 1

“This product has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine Inspection Service concerning the access of fruit fly host material into New Zealand from Australia”.

and

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

Specific Endorsement - Tomato

"This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia".

3.5 Cold Storage

COLD STORAGE IS KNOWN AS APPENDIX 5 TO THE BQA/IHS

Cold storage disinfestation treatments are permitted for the following commodities;

Citrus fruits Pears Table Grapes Avocado

Growers of commodities that do not have Quarantine Risk Group 2 pests listed in the Pest Lists at Appendix 1 of this Manual do not need to be registered for the New Zealand trade.

Growers of commodities where Quarantine Risk Group 2 pests are listed, must be registered with AQIS and must maintain spray and monitoring records to demonstrate that those Quarantine Risk Group 2 pests as listed, are being appropriately controlled by field management regimes.

Whilst grower registration may not be mandatory, all packinghouses must provide a list of growers names, addresses and allocated grower numbers for all produce that is being packed for the New Zealand market.

In the event that presently accepted fruit fly area freedom districts, fruit fly suspension zones are required, packinghouses must provide lists of growers who are in the deaclared quarantine suspension zones and a list of growers who remain in the area freedom districts surrounding an outbreak site.

Not withstanding the above registration requirements, each package of produce destined for New Zealand, must contain grower numbers or equivalent recognised code, packinghouse number and exporter name and address.

Tablegrapes must undergo a mandatory fumigation for the health pest redback spider. For details of the treatment requirements see Section 11 of this Manual and Section 3 regarding fumigators responsibilities.

TABLE 6
COLD STORAGE DISINFESTATION
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Avocado	Yes	Yes	Yes	Yes	Yes
Citrus	No	No	Yes	Yes	Yes
Pears	Not Required	Not required	Yes	Yes	Yes
Tablegrapes	Yes	Yes	Yes	Yes	Yes

Should live fruit fly be found during AQIS or Exporter inspections following treatment, the cold storage treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the cold storage treatment pathway will be suspended immediately for all Australian products until, an AQIS audit can be undertaken to determine the reasons for such failure.

Avocado growers must be registered to undertake field controls in accordance with New Zealand requirements for the Quarantine Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.

Tablegrape growers must be registered to undertake field management controls in accordance with New Zealand requirements for weedseeds which are classified as Quarantine Risk Group 2 pests/contaminants and packinghouses/treatment centres for the fumigation treatment for redback spiders.

3.5.1 Approved Cold Storage Disinfestation Treatments

The following treatment is approved for Queensland fruit fly for the commodities Pears, Tablegrapes and Citrus fruits,

The core temperature of the fruit must be held continuously at

. 0°C or below for not less than 13 days or

. 1°C ± 0.6°C for 16 days.

The cold storage disinfestation for Avocado is,

the core temperature of the fruit must be held continuously at

1°C (±0.2°C) for 16 days.

3.5.2 Registration

Cold storage premises used for cold disinfestation treatments will be registered by AQIS as an approved premises for treating/storing such fruits/vegetables as required under the Export Control Act and Fresh Fruits and Vegetable Orders and specifically for the New Zealand BQA/IHS list of commodities.

3.5.3 Cold Disinfestation Procedures

The registered treatment centre must have documented procedures in place for receival, identification by grower and packinghouse, segregation of all New Zealand destined fruits and marking/labelling all New Zealand BQA/IHS produce.

The following specific requirements must be in place to enable cold storage treatment centres to become registered for the New Zealand programs;

. minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of fruit or less. For each additional 250 cu.m. of fruit, or part thereof, one additional pulp sensor will be used.

. thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to staff using this equipment for temperature checks.

. the warmest area of each coolstorage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One sensor will be placed in fruit pulp at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors.

3.5.4 Temperature Recording

The following temperature recording requirements must be available before treatment centres will be registered for the New Zealand trade in BQA/IHS commodities;

. Continuous - Strip charts or data log sheets will be held for each cold treatment batch, (Note: temperature recorders must be capable of monitoring fruit pulp temperatures, Ryan or Cox or similar air temperature recorders are not acceptable.

. Intermittent - Sensor temperatures will be manually recorded twice daily (morning and afternoon) for each day of the cold treatment and verified once every 4 days by an AQIS authorised officer.

Temperature records will be retained for auditing purposes by AQIS/MAF

NOTE: Where the refrigeration unit is equipped with a print out recorder, the AQIS inspector will initiate the treatment when the treatment chamber has stabilised at the required temperature. When cold disinfestation treatment is completed, the AQIS inspector will sign that the treatment has been satisfactorily undertaken and the records covering the treatment will be copied with one copy being retained by the treatment facility and the second copy being retained by the AQIS inspector and filed.

3.5.5 Record Requirements

Details required to be recorded include;

. date and results of sensor/probe calibrations

. date chamber was loaded with produce

. type and variety of produce treated, the quantity by lots involved, all to be identified by packinghouse and exporter.

. date the maximum pulp temperatures initially recorded 1°C $\pm$ 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded or date the pulp temperature of the fruit within the chamber recorded 13 days at 0° or below or equivalent.

. either continuous print out records or records of a.m. and p.m. temperatures within the chamber on a daily basis throughout the treatment program.

. date produce was cleared from chamber with details of post treatment security and dispatch of produce.

. date and results of re-calibration of sensors following completion of treatment.

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

. the security of treated produce whilst on their premises.

. supervision of loading and unloading of all consignments into and out of their premises identifying and segregating those consignments intended to be treated for New Zealand.

. documenting all incoming and outgoing produce that is intended to be exported to New Zealand.

. the nominated person/s can be either the exporters delegate or the operator of the treatment establishment.

The exporter or the exporters delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or product substitution can occur for New Zealand destined produce.

The exporter or the exporters delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packages of untreated commodities) that could cause cross infestation of cleared produce.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.5.6 Auditing Requirements – Cold Storage Disinfestation Centres

The SEI will be responsible for arranging an audit schedule for cold disinfestation centres and will consider the number and size of treatments being undertaken in determining frequency of audits. It is recommended that each cold disinfestation treatment centre should be audited at least twice during the operating season.

Audits will cover the receival (packer – exporter lots), segregation, identification and treatment batches and the recording and despatch records, security arrangements when product is loaded, for all treated produce.

3.5.7 Phytosanitary Certificate Endorsements

General Endorsement - 1

"This produce has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia"

and

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

Specific Endorsement - Avocado

"The fruit in this consignment has been sourced from growers and blocks registered with the NVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)".

Specific Endorsement - Tablegrapes

"The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti (*Australian redback spider*)".*

Specific Endorsement - Citrus

"The citrus in this consignment has undergone a disease control program that ensures freedom from *Guignardia citricarpa* – Citrus black spot".

NOTE The States of South Australia, New South Wales and Victoria through their Departments of Agriculture conduct surveys for Guignardia citricarpa and these States are considered free of this disease at this time. The above additional declaration however must be inserted on all phytosanitary certificates for citrus fruits regardless of origin.

3.6 Non Host Status

NON-HOST STATUS IS KNOWN AS APPENDIX 6 TO THE BQA

A number of commodities are agreed by MAF and described as non-host status. **Pineapple of the smooth cayenne variety** are fruits which are regarded as a non-host of endemic Australian fruit flies and can be shipped under the BQA subject to normal AQIS inspection and phytosanitary certification.

Growers of pineapple consignments being shipped to New Zealand must have records which can verify the variety of pineapple to be of smooth cayenne parentage.

It is important to note that non-host status applies only to Australian endemic species of fruit flies and therefore, should Australia have an incursion of an "exotic" species of fruit fly for which pineapple may be a host, this Appendix to the BQA, may be suspended until the fly is eradicated.

Under this treatment, growers do not need to be registered for the New Zealand trade.

Not withstanding the above, all packages of non-host produce being exported under the BQA/IHS must have growers numbers, packinghouse number and exporter name and address.

Packinghouses who require AQIS inspection on the premises must be registered by AQIS for this purpose as required under the Export Control (Fresh Fruits and Vegetables) Orders.

Exporters of non-host produce will need to be registered as exporters under the BQA/IHS as even though the fruit is considered non-host status, this is an official treatment under the BQA/IHS and pathway systems must be in effect.

All smooth cayenne variety pineapples must be secured and protected against substitution or malpractice at all times during transit of fruits which are destined for New Zealand.

Exporters are required to ensure that adequate security from point of loading ex packinghouse through to final export loading has been delegated or undertaken directly by the exporter. Records must be kept throughout any transport movement of non-host products

3.6.1 Phytosanitary Certificate Endorsement

General Endorsement - 1

"This produce has been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia"

and

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

3.7 Heat Treatments

HEAT TREATMENTS - KNOWN AS APPENDIX 7 TO THE BQA

Heat treatments such as vapour heat treatment (VHT) and high temperature forced air (HTFA) are recognised treatments for some commodities however, at this time Australia has not submitted any efficacy data to MAF seeking approval of VHT or HTFA as approved treatments for all nominated fruit flies for any Australian commodities.

NOTE Australian disinfestation work for VHT has only been conducted with relation to Queensland and Mediterranean fruit flies.

Should any heat treatments be approved by MAF in the future, requirements and conditions will be included in this Manual at that time.

Australia is not permitted to use heat treatment disinfestation methods for fruit fly host materials to New Zealand at this time.

3.8 Dimethoate Dipping - Interim Approved Cucurbits

DIMETHOATE DIPPING - INTERIM APPROVED PRODUCTS - CUCURBITS - KNOWN AS APPENDIX 8 TO THE BQA

The cucurbits, cucumber, honeydew melon and scallopini are approved for export to New Zealand under the "interim approved treatment of dimethoate dipping".

The conditions and requirements for dimethoate dipping/spraying as listed at Section 3.4 of this Manual must be fully complied with. The conditions for identification, segregation, security and documentation requirements must be fully complied with.

Growers and packers of cucumber, scallopini, honeydew melon which are not listed at Section 3.4 must be registered for the New Zealand trade as the interim treatment is based on additional field controls for fruit fly, as well as the dimethoate dipping disinfestation treatment

Growers will maintain monitoring and spray diaries and will make these records available to AQIS officers upon request. Growers can elect to use commercial crop monitors for the purpose of monitoring however, all corrective actions must be recorded in spray diaries.

If crop monitors are to be used by growers, the crop monitor must be registered with AQIS for this purpose and all crop monitor records must be made available to AQIS authorised officers for audit purposes.

Growers not adequately maintaining field control monitoring and spray diaries may be suspended from the New Zealand BQA/IHS programs.

Packinghouses packing "interim approved dimethoate treated products" must maintain identification, segregation and security of all New Zealand destined produce and have such fruits clearly marked. This includes identification, segregation and security from cucurbit species nominated at Section 3.4 of the Manual. ie zucchini and honeydew melons must be received, processed, packed and stored completely separated from each other.

All packaging of cucurbits must contain grower numbers, packinghouse numbers and the exporters name and address.

3.8.1 Dimethoate Treatment Centre Requirements

All responsibilities as detailed at Section 3.4 of this Manual for treatment centres involved in dimethoate disinfestation procedures, must also be undertaken for "interim approved products".

3.8.2 Phytosanitary Certificate Endorsements

General Endorsement - 1

"The fruits/vegetables have been treated in accordance with Appendix 8 of the Arrangement between New Zealand Ministry of Agriculture and Forests and the Australian Quarantine Inspection Service concerning the access of fruit fly host material into New Zealand from Australia".

and

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

3.9 Methyl Bromide Fumigation - Interim Approved Product

METHYL BROMIDE FUMIGATION - INTERIM APPROVED PRODUCTS - WATERMELON - KNOWN AS APPENDIX 9 TO THE BQA.

Watermelon is the only product that has an interim methyl bromide fumigation treatment.

All the requirements listed at 3.3 of this Manual, (Fumigation Treatments), must be applied including treatment times, temperatures and dose rates.

The responsibilities of packinghouses, treatment centres and exporters as detailed at Section 3.3. of this Manual must be fully complied with at all times. All recording must be retained on file and made available at any time to AQIS authorised officers.

In addition to the responsibilities listed at Section 3.3 of this Manual, growers of watermelon must be registered with AQIS for the purpose of maintaining field controls to minimise the risk of fruit fly infestation whilst fruit is being produced. Growers must maintain property pest monitoring diaries and spray diaries for each field of watermelons being produced.

Packinghouses are required to be registered because of their responsibility to maintain security of watermelon whilst on the packing premises.

All packages of watermelon will have grower numbers, packinghouse numbers and exporter name and address on them.

Exporters are responsible to ensure that the security of the watermelons during all phases of transportation cannot be breached and that the produce cannot be reinfested or substituted following treatment.

3.9.1 Phytosanitary Certificate Endorsement

General Endorsement - 1

"The watermelons in this consignment have been treated in accordance with Appendix 9 of the Arrangement between New Zealand Ministry of Agriculture and Forests and the Australian Quarantine Inspection Service concerning the access of fruit fly host material into New Zealand from Australia".

and

General Endorsement - 2

"The watermelons covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

SECTION 4. MANAGEMENT RESPONSIBILITIES

This section lists and describes the responsibilities associated with any BQA/IHS export pathway to be performed by all those organisations, groups and individuals to ensure that the BQA/IHS is developed, maintained and audited to standards that ensure confidence in the systems being implemented and accuracy in the phytosanitary certification which must be provided for export of fruit fly host products to New Zealand.

4.1 AQIS Canberra Office

The AQIS organisation structure and management flow chart is at Attachment 1 at the end of this Section. It is recommended that each AQIS Regional Office and/or State Department develop its own organisation structure and management flow chart as it will apply to the management and auditing of the Australian - New Zealand BQA/IHS and include this information for distribution within that State.

Manager - Plant Programs Section - Animal and Plant Programs Branch

. will be responsible for ensuring;

- all components of the BQA/IHS Systems Operations Manual are being complied with consistently, over all commodities and treatments through all States.

- by delegation within Plant Programs Section, for all establishments/premises that are required to be registered, that regular audits of State Departments (where applicable) and AQIS Region/State Office systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the BQA/IHS and that a proper record management system is available and easily accessible.

- for Certification Assurance (CA) establishments, that AQIS Region/State Offices are conducting audits of these establishments in accordance with the requirements of QMP - SM - 01 and the requirements of the BQA/IHS and this Manual.

- that wherever deficiencies are found in the systems, either at or within the States' responsibilities, that any adverse findings are recorded and corrected at the earliest opportunity and are subsequently re-audited to verify that corrective action requests have been satisfactorily implemented.

- collate and circulate up to date National lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.

- that all amendments to this Manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.

- ensuring that audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents), fruit fly area freedom trapping and

monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

4.2 State Departments of Agriculture (or equivalents)

Where AQIS is not directly represented at State level (Tasmania, Western Australia and Northern Territory), State Departments of Agriculture or their equivalents are responsible for the following;

. the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,

. ensure all exporters, treatment centres, packinghouses and growers (where applicable) are meeting the requirements of the BQA/IHS and the directions contained in this Manual,

. ensure inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities from that State, that are being exported to New Zealand,

. ensuring they have registered all required components of the export pathways for commodities being exported through that State and have a Register of registered growers, packers, treatment centres and exporters for the BQA/IHS commodities which have been forwarded to AQIS Canberra Office and that there are systems in place to forward amendments to the Register on a frequent basis (monthly),

. ensure that audits (including internal audits), are being conducted at the correct frequency so that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,

. ensure that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed.

. where required, ensure that the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual State management plans (as submitted to MAF New Zealand), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of New Zealand NASS Standards 158.03.06 and 158.03.07 and

- will report to AQIS Canberra Office any detections of economically significant fruit fly species found within trapping grids within 24 hours of identification.

4.3 AQIS State Offices

AQIS State Offices through the Regional Managers and Program Managers (Exports) located in Queensland, New South Wales, Victoria and South Australia are responsible for the following;

. the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,

. ensure all exporters, treatment centres, packinghouses and growers (where applicable), are meeting the requirements of the BQA/IHS and the directions contained in this Manual,

. ensure inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities from that State, that are being exported to New Zealand,

. ensuring they have registered all required components of the export pathways for commodities being exported through that State,

. ensure that audits (including internal audits), are being conducted at the correct frequency and that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,

. ensure that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed,

. ensure all inspectors in their State, involved in the New Zealand BQA/IHS export pathways, are immediately informed of any conditions and/or restrictions, when fruit fly outbreaks are reported to them by Canberra Office, in any district of Australia,

. ensure Canberra Office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

4.3.1 Registration Requirements

AQIS Offices and State Department agencies will implement a registration system for all growers (where applicable), packinghouses (where applicable), treatment centres and exporters who intend to produce, pack, treat and export fruits and vegetables as listed in this Manual for export to New Zealand.

AQIS prefers that growers should register for the New Zealand programs with their packinghouse or exporter however AQIS will accept grower applications for registration at local offices, State Departments of Agriculture or their equivalent. Whichever authority accepts the registration of growers/properties, they will be responsible to ensure that registration details are forwarded to both the AQIS State Office and the AQIS Canberra Office. The accepting authority will also be responsible for ensuring grower spray and monitoring diaries are current and relevant.

Growers of commodities who require registration, will not be permitted to participate in the New Zealand trade for that commodity, unless AQIS has details of the properties or blocks for registration, of that grower.

All organisations that are undertaking approved disinfestation treatments must be registered, packinghouses where required for specific commodities must be registered and all exporters of fruit fly host commodities (including non-host commodities) must be registered for each commodity.

It is the responsibility of each individual State/region to develop a system of recording registrations and that such records are maintained so they are auditable.

Registration details will include name, address, unique number identifier, purpose of registration (grower, packer treatment centre etc.), and current status e.g. active/non active.

AQIS State Offices and State Department Agencies, must forward a list of registrations made in that State to Canberra Office for an Australian consolidated list. A list of current registrations should be forwarded prior to the commencement of each commodity season and must be updated/amended as new applications are processed during a season. Canberra Office will make this list available to all State Offices/Agencies through the LAN computer network or hard copy documents.

NOTE This information is extremely important particularly when exporters are sourcing fruits from interstate but assembling export consignments in their home State prior to export to New Zealand.

4.3.2. Sampling Requirements

4.3.2.1 Consignment Line Samples

Following individual grower line inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines can only consist of the one genus of fruits/vegetables. i.e. lemons, oranges and mandarins that have had a common treatment (area freedom) or one treatment centre (cold storage disinfestation) applied.

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. There can be no rules that must be applied however the following guidelines may assist in determining selection of sample cartons;

- select one or more samples from the grower submitting the largest lot within the consignment,

- select one or more samples from the commodity comprising the greatest quantity in the consignment line,

- select at least one carton from the commodity seen to present the greatest quarantine risk,

- select at least one carton from any known “poorer” performing growers/packers or from a newly registered grower or packer.

Consignment lines that are passed after AQIS inspection, will be identified as “passed for New Zealand” and immediately separated from any other produce which has not been passed or destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.2.2 Grower Line Samples

A grower line is a number of packages of one commodity from one grower with one common treatment, presented for inspection at one time. This includes a grower line that is presented for inspection that will subsequently be split into separate consignments for export.

Grower lines that are passed after AQIS inspection, will be identified as "passed for New Zealand" and immediately separated and segregated from any other produce which has not been passed or destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.3 AQIS Inspection Procedures

AQIS will carry out inspections as required under the New Zealand BQA/IHS only where establishments provide an area which is suitable for the purpose and contains:

- a suitable bench or table on which to work,
- suitable fixed lighting of a minimum of 600 lux,
- a clean and relatively noise free area in which to perform inspection functions,
- all relevant BQA/IHS documentation covering the line to be inspected is available prior to inspection commencing.

Inspections performed by AQIS for the BQA/IHS programs will be recorded on "Inspection Record - New Zealand" Appendix 3.4 attached.

NOTE Alternative types of Inspection records can be developed and used as long as it contains at least the information supplied on the inspection record sheet as detailed in Appendix 3.4

AQIS inspection may be by grower line or by consignment line at the option of the exporter (but exporter must undertake grower line inspection and provide detailed records of such inspections), and will be in accordance with the sampling plan detailed in Table 1 and at the same sample regime as used by the exporter/exporter delegate.

For inspection on a consignment basis produce can be from multiple grower/packer combinations but will belong to only one commodity group.

NOTE: Not withstanding the requirements of this Manual, should AQIS consignment inspection result in a rejection for quarantine purposes, the whole consignment is rejected not just that particular grower line. If the exporter requires the balance of the consignment for export purposes, the exporter/exporter delegate must re-inspect the balance of the consignment (as it is a new lot), by grower line before AQIS will re-inspect.

Exporters will provide AQIS officers with inspection records of the consignment line/grower line inspection details before AQIS will commence their inspection. If all records are not provided or any records are incomplete, the consignment will not be inspected until these records are completed and sighted.

NOTE AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom of the RG 1 pest, mealybugs. Until industry can provide clear scientific evidence that the New Zealand quarantine RG 1 mealybugs - Ferrisia virgata, Maconellicoccus hirsutus, Nipaecoccus viridis and Planococcus pacificus are not associated with the export pathway.

4.3.4 Rejection Procedures

A rejection on inspection by AQIS of either consignment or grower lot, does not necessarily indicate that a packinghouse or grower has breached the conditions of the Arrangement. It should however indicate a possible problem within the packer/exporter system and therefore it will be recorded.

All rejections are to be recorded on Form Ex 161 (Inspection Advice Note) and must record grower, packer and exporter/delegate through which the commodity has passed.

Exporters/exporter delegates who fail two inspections in any one season must be audited immediately to ascertain if there are reasons that AQIS may consider necessary, for suspending the nominated inspector/quality controller from the New Zealand programme, or if corrective actions can be implemented quickly, the possible need for a follow up audit within 7 days.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for Quarantine Risk Group 3 Pests - Immediate suspension of treatment centre (and in the case of "Area Freedom from Fruit Flies", all area freedom districts in that State are suspended), and the possible suspension of other elements of the export pathway as may be determined by audit. Audit/s to be undertaken at earliest opportunity.

- Any rejection for Quarantine Risk Group 2 Pests - Senior Inspector/Supervisor to be informed immediately to consider if audit of grower, packer, exporter or exporter delegate is necessary. This may depend on type and quantity of infestation detected.

- Any rejection for Quarantine Risk Group 1 Pests - The consignment can be totally withdrawn from the New Zealand export market or corrective action must be undertaken either by treating the product (fumigation etc.) or the exporter can withdraw the offending part of the consignment, undertake reinspection before re-presenting the remaining part of the consignment for further AQIS inspection.

4.3.5 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed including any that may have not been forwarded to New Zealand. (i.e. sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: The "split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has approved that the necessary documentation and record keeping is satisfactory and auditable.

This procedure will allow one inspection at the fee for service rate and the first phytosanitary certificate free. All subsequent phytosanitary certificates both originals or certified copies, will be charged for at the rate determined in the Fees Orders.

Split consignments where exporters/importers want to reduce the MAF on arrival inspection, must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

- notification of consignment details to MAF as they occur,
- the New Zealand communication links (importer and MAF contacts),
- flow chart detailing how the phytosanitary certificate moves through the system.

Each such procedure must have AQIS and MAF approval before implementation.

4.4 Untreated Produce Being Forwarded from Country Areas

Growers who are involved with Risk Group 2 and 3 commodities and, who will be forwarding untreated produce from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate, signed by an authorised AQIS officer), or a signed copy of an EX 28 Notice of Intention to Export or, a grower declaration form, attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide either the transfer certificate, Notice of Intention to Export or grower declaration to AQIS, prior to any AQIS inspection being undertaken.

4.5 AQIS Auditing Requirements

4.5.1 AQIS BQA/IHS Audit Requirements

AQIS inspection staff are to conduct audits of growers (where applicable) to ensure compliance with registration requirements. Such audits are to include an assessment of growing practices, field hygiene, pest monitoring, spray diary entries and SBV status (avocado growers only). AQIS however, may not audit all individual growers who are supplying fruit to:

- * CA accredited packinghouses,
- Packinghouses who pack commodities which do not require grower registration,
- * Growers who are using the services of a registered crop monitor.

* However, some growers under these regimes must be audited as part of the audit of the packinghouse establishments as documented in Grower/Audit frequency, Section 4.8.1 of this Manual.

4.5.1.1 Grower/Audit Frequency:

AQIS audits of growers will be conducted where a commodity has Quarantine Risk Group 2 pests listed which require field management controls. To enable phytosanitary certification in accordance with New Zealand requirements, audits will be conducted to ensure compliance with the stated directions contained in this Manual.

Where Quarantine Risk Group 2 pests are listed within a commodity Pest List, growers must be registered and must undertake the required monitoring and field controls and have records of all management surveillance and corrective actions.

The accepting authority for grower registrations, will ensure audits are conducted and ensure property records are maintained in accordance with the directions in this Manual.

Upon application to be a registered grower, the accepting authority will conduct an "initial" audit of the growers property and the record keeping to satisfy themselves that the grower can meet the requirements of this Manual for that commodity. Following an initial audit, growers will have at least one other "additional audit" after the initial audit during the subsequent growing season.

For growers previously registered and having successfully participated in the New Zealand program the previous season/year, one audit will be formally conducted early in the new picking/packing season. (i.e. no initial audit is required in subsequent years/seasons providing registration and supply to New Zealand has been continuous).

Should deficiencies be found at anytime during the registration period, follow up audits will be required to ensure corrective actions have been completed which will allow registration to be continued. Should a grower not manage the registered property in accordance with the directions of this Manual and make no corrective action where deficiencies are detected, the property must be placed under suspension from the New Zealand program.

Where an Agency other than AQIS has placed a property under suspension from the New Zealand trade, that Agency must inform their AQIS State Office of the suspension at the earliest opportunity. The AQIS State office will advise inspection staff in the area of property suspension and advise AQIS Canberra Office as soon as possible after obtaining such a report.

All audits of growers (AQIS or State Department staff), will be "announced audits" giving the grower at least two days notice. All AQIS audits are chargeable with the times involved being debited to the exporter or packinghouse with whom the grower will be supplying product.

Unannounced monitoring audits can be conducted if in the opinion of the Senior Inspector (Exports) a need is demonstrated. Unannounced monitoring audits are not chargeable unless a major non-conformance is detected.

4.5.1.2 Grower Audits - Certification Assurance Systems

Where a packinghouse has an approved Certification Assurance Arrangement with AQIS, and is involved in a commodity which has Quarantine Risk Group 2 pests, the packinghouse must register and audit those growers to ensure that stipulated field management controls are effected.

During normal AQIS auditing of an establishments' CA Arrangement, a sample of registered growers will be audited as part of the overall quality system for compliance with the requirements of the BQA/IHS and the directions given in this Manual. If a major non-conformance is detected at such grower audits, the suspension of the packinghouse may be considered necessary as it is the packinghouse that is responsible for ensuring compliance with AQIS/New Zealand requirements.

4.5.1.3 Audit Requirements/Growers - Suspension Criteria

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

. no pest control or monitoring records,

. bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,

. bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.

. evidence of growers not committed to carrying out the requirements as set out in this Manual,

. no corrective action to control quarantine weeds/seeds or pests and diseases,

4.5.1.4 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow up audit, should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

. inadequate monitoring/spray records,

. insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),

. evidence of quarantine weeds within the property (but not yet seeding). This is of particular relevance to the crops, table grapes and capsicums which are subject to this type of infestation,

. adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days or a week or so, is dependant on the type of problem and the relationship to growing/harvesting of the current crop. SI Exports will have to determine whether follow up audits will be required or not.

4.6 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent) to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or their equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for, and, such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where, through AQIS packinghouse grower audits, it is found that at least three growers are covered by the same crop monitor, and grower audit reveals substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived, by the SI (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

4.6.1 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

. failure to maintain individual grower records,

. inadequate or incorrect records,

. failure to provide growers with a record of each visit including any recommended pest control measures,

. recommendations to growers to apply non-recommended or unregistered chemicals.

4.7 Audit Requirements/Packinghouses

All packinghouses packing BQA/HIS produce will be audited annually (minimum) for compliance with grower numbers/addresses registers, training of staff within the establishment, completion and storage of records and security responsibilities. Variance to audit requirements can be made at the discretion of the SEI.

Packinghouses involved in commodities with Risk Group 2 pests will be subject to AQIS audit on initial application/registration under the New Zealand requirements and then at least on one further occasion during the actual packing season.

Packinghouses which are involved in physical or chemical disinfestation treatments for the New Zealand BQA/IHS will be subject to auditing requirements against the directions contained in Section 3 - Approved Treatments, of this Manual.

A packinghouse that has been delegated and accepted exporter inspection duties as required by this Manual, will be audited to ensure that all such inspections have been conducted in accordance with the directions of this Manual and that proper records have been maintained and filed.

Where packinghouses are required to be registered under two or more of the above criteria, audits of each element requiring registration will be conducted in one audit.

If a packinghouse audit detects minor non-conformities against the requirements and directions of this Manual, the packinghouse will be required to address the concerns, and a follow up audit will be scheduled within 7 days.

If a packinghouse audit detects major non-conformance in any element, consideration will be made as to whether the packinghouse should be suspended until the required corrective action has been implemented and successfully re-audited. The Senior Inspector (Exports) will have the authority to assess and implement the necessary actions depending on the circumstances surrounding a non-conformance against the systems.

The basis of all packinghouse audits is to ensure it is performing its responsibilities for those commodities/treatments/inspections under the BQA/IHS arrangements and the directions of this Manual.

CA accredited packinghouses will be audited for compliance with the New Zealand BQA requirements under their existing audit programmes.

All audit time involved at the packinghouses is to be charged to the packinghouse involved.

4.7.1 Packinghouse Audits/Non Compliance

AQIS may deregister a packinghouse for the New Zealand BQA/IHS if:

- the packinghouse was sourcing fruit/vegetables from unregistered growers where it is a requirement of this Manual for them to be registered.

- the packinghouse did not have procedures in place for identifying commodity specific registered grower/s,

- the packinghouse did not mark packages with a registered grower and packinghouse number,

- the packinghouse did not have procedures in place to segregate commodity specific growing lines through the packing process, (including area freedom treatment commodities),

- the packinghouse did not have trained staff operating at the time of packing BQA/IHS produce, that could recognise pests, disease and weeds seeds, that are of concern to New Zealand,

- the packinghouse did not have procedures in place to deal with suspect fruit with a sting, rot or bruise,

- the packinghouse did not comply with "inspection procedures" as delegated and accepted by them through their exporter,

- the packinghouse did not comply with any other requirement set out in the BQA/IHS and the directions contained in this Manual.

4.8 Audit Requirements - Treatment Centres

Each treatment centre (either fumigation, chemical dip/spray treatment or cold), is responsible for clear, precise, documented and auditable procedures that detail how product relating to the BQA/IHS process is;

1. Identified.
2. Treated and marked as treated.
3. The treatment process and controls.
4. Documented treatment records
5. How measuring equipment is calibrated and how often and by whom.
6. Secured after treatment.
7. Segregated from untreated product.
8. Supervised at loading.

Each treatment centre establishment (excepting fumigation facilities which are subject to direct supervision of each treatment performed), will be audited by AQIS at least once a month unless a premise has a CA arrangement with AQIS. Audit reports will be kept on file for a period of not less than 2 years.

AQIS requires that all treatment centres (other than fumigation centres), be monitored on a monthly basis during their operating season and that audit reports are to be kept detailing when auditing/monitoring checks were performed. These audits/monitoring checks can be undertaken as part of inspection duties where inspections are performed at such centres but reports must be written and placed on file when they are actually undertaken.

Note Senior Inspector (Exports) has the authority to vary the above audit requirements on the basis of compliance with the operating instructions of this Manual. ie in the case of continued substantial compliance, audit intensity may be reduced, in the case of marginal compliance or repeated non-conformance, intensity may need to be increased.

Inspectors must ensure that treatment facilities are maintained in a condition that will provide efficacy in treatment programs, that all measurement gauges are regularly calibrated and records maintained to verify it. That movement of treated produce must be documented and recorded, particularly in relation to load out activity and that security of produce is maintained at all times that the product is on the premises.

4.8.1 Treatment Centre Audits/Non Compliance

Should monitoring/audit checks when carried out on a treatment centre premises reveal non conformances, an official audit must be scheduled as soon as possible so as to instigate corrective action.

Findings that may lead to suspension as a registered treatment centre or increased auditing scheduling under the BQA/IHS will include :

. insufficient/improper identification of treated and untreated product,

. incorrect treatments,

. improper documentation,

. no calibration or records of calibration regarding measuring equipment,

. no segregation of untreated product and treated BQA product,

. product not correctly marked as treated or secured after treatment.

All audit time is to be charged to the treatment centre involved.

4.9 Audit Requirements - Exporters

AQIS will perform an audit of all exporters registered for the New Zealand programme annually. All relevant documentation for all New Zealand BQA/IHS consignments must be made available to the AQIS authorised officer. Records may include, grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter/exporter delegate inspections, export documentation including EX 186 - Transfer of Product (or equivalent documents), EX28's - Notice of Intention to Export and Phytosanitary Certificates.

4.9.1 Exporter Delegate Audits

In addition to any scheduled packinghouse audit, where packinghouse personnel are also approved to act as an exporter delegate for the purpose of inspection, treatment and/or load out security, two audits per year will be conducted on the exporter delegates responsibilities and their records. Audits will include inspection documentation, knowledge of Risk Group 1, 2 and 3 pests, demonstration of inspection techniques, sample selection and knowledge of the inspection requirements of this Manual.

4.9.2 Exporter/Exporter Delegate - Non Compliance

An Exporter/Exporter Delegate may be suspended from the BQA/IHS if they are not meeting their obligations under the BQA/IHS. Major non-compliance may include:

. failing to provide up to date and correct documentation, including Inspection Records for New Zealand BQA/IHS product,

. failing to correctly sample and inspect product,

. failing to appropriately train (or be trained), Quality Control inspectors for the purposes of inspecting BQA/IHS product,

. failing to segregate BQA/IHS treated/passed product from non treated product,

. failing to fulfil any other requirement/responsibility as outlined in this Manual.

Additional audits (scheduled by the SI (Exports)), will be scheduled where an audit reveals minor non-conformities occurring within the exporter/exporter delegate responsibilities. The exporter/exporter delegate audit costs, will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made and agreed by AQIS.

4.9.3 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

. exporter/delegate inspection records,

. grower pest monitoring records and pest control diaries (commodity specific),

. packer training and associated pest identification,

. premises general hygiene,

. cleanliness of machinery and equipment,

. segregation and identification of produce/products,

. staff responsibilities,

. exporter or exporter delegate performing inspections are competent in carrying out their duties and know correct identification of pests/weed seeds.

Should auditing prove satisfactory and fails to identify any breach of the BQA/IHS arrangement or responsibility under the programme, all parties will be immediately re instated.

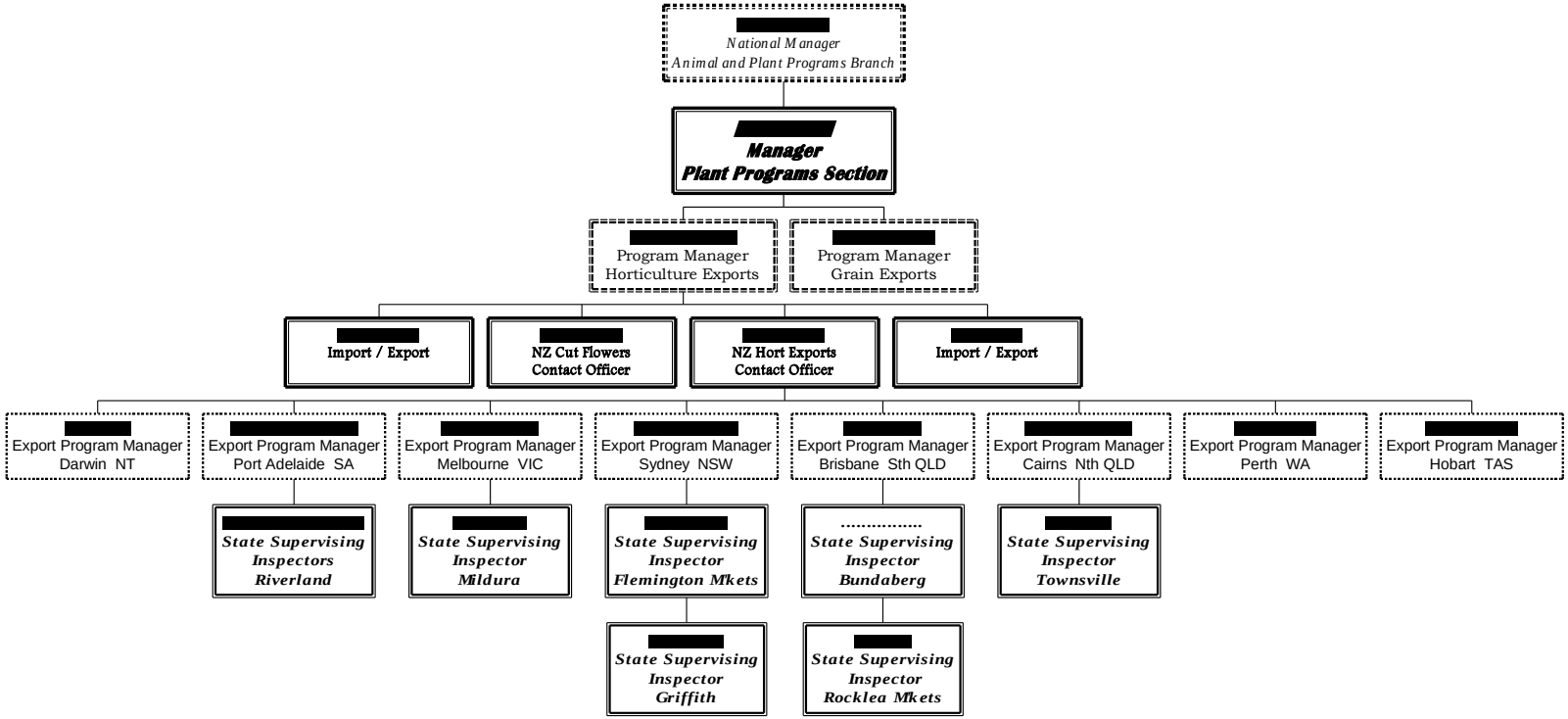
Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to State Senior Inspector Exports who will co-ordinate necessary action and advise all parties. Copies of any audit will be given to the relevant components of the pathway audited and kept on file in the State AQIS or Department office.

Inspectors undertaking these audits must be either AQIS AQA, AQIS CA or ISO/CA trained and accredited.

Attachment 1 to Section 4 – AQIS Plant Contact List

AQIS Plant Contact List



SECTION 5. GROWER RESPONSIBILITIES

5.1 Registration

Where growers are growing and exporting commodities where there is no listing for Quarantine Risk Group 2 pests in the Pest Lists Section of this Manual, growers of those commodities do not need to be registered for the purposes of exporting BQA/IHS commodities to New Zealand.

Growers of commodities (excepting southern state citrus growers), which have pest listings at Quarantine Risk Group 2, must be registered with AQIS for the purpose of exporting those commodities to New Zealand. The commodities which do have Quarantine Risk Group 2 pest listings are **Avocado, Citrus and Tablegrapes.**

Tomato growers who must treat their produce with dimethoate dips/sprays must also be registered under this BQA/IHS because of the requirement to only treat approved varieties of tomatoes. Cucurbit growers of commodities which do not have officially approved treatments (honeydew melons, cucumber and scallopini), must also register as the requirement for field controls is part of the "interim approved" treatment pathways.

Growers who must be registered for specific commodities, will do so either by making application direct to AQIS or through their packinghouse or exporter. Packinghouses and exporters must forward any grower applications through to AQIS/State Offices for inclusion on the Master List (compiled by AQIS Canberra Office) of growers, approved for the New Zealand trade in that/those commodities that require grower registration.

Packinghouses/exporters who accept application for registration from growers will be responsible for maintaining all information which those growers will need to have in place to ensure compliance with the direction contained in this Manual and for auditing those growers in accordance with the directions contained in this Manual.

5.2 Responsibilities

Growers of commodities with Quarantine Risk Group 2 pest listings (as covered in 5.1 above), must maintain spray, monitoring diaries and field hygiene requirements that demonstrate an appropriate level of management and recording for those pests/contaminants listed at Quarantine Risk Group 2 in the Pest Lists as contained at Appendix 2 of this Manual.

Growers of citrus fruits whilst having the Risk Group 2 pest *Guignardia citricarpa* - Citrus black spot, will only need to be registered in the State of Queensland where this disease if found and they must maintain spray and monitoring diaries for control of this pest. Growers in the Southern states of New South Wales, Victoria and South Australia are not required to be registered for this program and the requirements for monitoring and spray diaries is not required as State Departments regularly survey for this disease.

Growers must register each block or property/ies that they will be using to grow those commodities which have Quarantine Risk Group 2 pest listings.

Growers are permitted to use the services of AQIS approved crop monitors for the New Zealand BQA/IHS arrangements. Should growers use the services of an AQIS approved crop monitor, the grower must still maintain spray diaries showing implementation of any corrective actions undertaken on the New Zealand registered property/block/commodity.

Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered New Zealand grower that they are undertaking services for.

5.3 Grower Audits

The registering authority (State Department, AQIS, packinghouse or exporter), will undertake grower audits at the following frequency;

. in the initial year of registration,

- before the grower is approved as a New Zealand grower (before harvesting commences) and
- one further audit during the growing season.

. where grower registration is continuous, in subsequent years,

- once during the season.

AQIS audits of grower responsibilities will be conducted simultaneously with packinghouse/exporter audits. All audit time will be charged to either the packinghouse or the exporter.

NOTE; GROWERS WILL NOT BE CHARGED FOR AUDITS ASSOCIATED WITH THE NEW ZEALAND BQA. ALL AUDIT CHARGES ARE TO BE INVOICED TO THE PACKINGHOUSE OR EXPORTER WHO IS PACKING/ACCEPTING THE REGISTERED GROWERS' FRUITS/VEGETABLES UNLESS ANOTHER SATISFACTORY ARRANGEMENT IS MADE BETWEEN AQIS AND THE PARTIES INVOLVED.

5.3.1 Grower Suspensions

Growers will be suspended from the New Zealand trade if spray and monitoring diaries are not accurately maintained through-out the year or growing season.

With relation to growers of tablegrapes and capsicums, crops which have weedseed quarantine pest declarations, such growers may be suspended if at audit it is found that prohibited weeds are not being properly managed and/or controlled.

All growers of Quarantine Risk Group 2 pests must maintain monitoring and spray diaries of their registered blocks. All activities shall be recorded even where pests are noticed but are of small infestation levels which are deemed inappropriate to control with chemical sprays.

As contained at Section 4.6.2.3 the following considerations may be applied to growers during grower audits;

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

. no pest control or monitoring records,

. bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,

. bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.

. evidence of growers not committed to carrying out the requirements as set out in this Manual,

. no corrective action to control quarantine weeds/seeds or pests and diseases,

5.3.2 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow up audit should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

. inadequate monitoring/spray records,

. insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),

. evidence of quarantine weeds within the property (but not yet seeding). This is of particular relevance to the crops, table grapes and capsicums which are subject to this type of infestation,

. adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days or a week or so, is dependant on the type of problem and the relationship to growing/harvesting of the current crop. SI Exports will have to determine whether follow up audits will be required or not.

5.3.3 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent), to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or there equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for, and, such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where through AQIS packinghouse grower audits, it is found that at least three growers are covered by the same crop monitor, and grower audit reveals substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived, by the SI (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

5.3.4 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

. failure to maintain individual grower records,

. inadequate or incorrect records,

. failure to provide growers with a record of each visit including any recommended pest control measures,

. recommendations to growers to apply non-recommended or unregistered chemicals.

SECTION 6. PACKINGHOUSE RESPONSIBILITIES

Packinghouses which are packing fruits/vegetables for New Zealand do not need to be specifically registered for the New Zealand export trade unless they are packing commodities with Risk Group 2 pests or have been delegated and accepted duties/responsibilities by exporters.

Packinghouses that are effecting treatments as defined in the BQA or in this Manual must be registered for that purpose.

Therefore all packinghouses which are packing fruits/vegetables under the "Area Freedom" treatment (Appendix 2 to the BQA), must be registered for this purpose.

Packinghouses will however, maintain secure conditions for the packing of growers fruits and will have systems in place to ensure grower identification and segregation of New Zealand fruits is maintained so that cross contamination with other commodities or the same commodity for markets other than New Zealand is minimised.

All fruits/vegetables for the New Zealand export trade must include grower numbers and packinghouse numbers of each individual package. It is the exporters responsibility to ensure that the exporter name and address is on all packages.

Packinghouses must have records identifying produce from each grower that is received, packing details and despatch details for each batch/lot of fruit that is to be certified for New Zealand.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal packinghouse registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

6.1 Grower Registration - Commodity Specific

All packinghouses must provide a list of growers names and addresses and designated numbers/codes for all suppliers of New Zealand BQA/IHS produce into that packinghouse.

As per Section 3 of this Manual, growers of some commodities will be required to be registered for the purpose of field management controls for pests which are determined to be Quarantine Risk Group 2 pests. Commodity specific pests lists are at Appendix 2 of this Manual.

Where a packinghouse is packing fruits/vegetables that have Quarantine Risk Group 2 pests listed, all such fruits must only be sourced from registered growers of that commodity. Growers of citrus fruits whilst having the Risk Group 2 pest - Citrus leaf miner, will not need to be registered although they must maintain spray and monitoring diaries for control of this pest.

Growers have the opportunity to make registrations with AQIS, State Departments of Agriculture (or their equivalents), packinghouses or exporters. Where a grower makes application for registration with a packinghouse, the packinghouse is responsible to ensure:

. that AQIS State Regional Office is aware of the registration/acceptance and

- the packinghouse must ensure that all grower requirements as detailed at Section 5 of this Manual have/are being complied with and,
- the packinghouse will maintain records detailing audits of the grower property/block registered for the New Zealand BQA/IHS trade.

Packinghouses must have systems in place to ensure incoming produce is identified by grower and for commodities which have Quarantine Risk Group 2 pests that these commodities are segregated from any other fruits to minimise cross contamination of this produce.

6.2 Packinghouse Responsibilities - Commodity Specific

Packinghouses which are packing fruits/vegetables for New Zealand do not need to be specifically registered for the New Zealand export trade unless they are packing commodities with Risk Group 2 pests or have been delegated and accepted duties/responsibilities by exporters.

Packinghouses that are effecting treatments as defined in the BQA or in this Manual must be registered for that purpose.

Therefore all packinghouses which are packing fruits/vegetables under the “Area Freedom” treatment (Appendix 2 to the BQA), must be registered for this purpose.

Packinghouses must ensure that the fruits/vegetables they are packing are free of all quarantine pests as contained in the pest listings at Appendix 1 of this Manual. This means all Risk Groups 1,2 and 3 and any Regulated non plant pests which are listed, which are to be certified on the phytosanitary certificate. Graders, sorters and packers must be trained to be able to recognise all pests and symptoms and to record findings of these pests.

Packinghouses packing BQA/HIS commodities must perform a 600 unit inspection for each grower that makes up a consignment. This inspection does not replace an exporter or exporter delegate inspection for that commodity and must be undertaken regardless of exporter inspection requirements. Records of these inspections must be retained for audit purposes.

6.3 Inspection Requirements

Packinghouses must undertake grower line inspections for all consignments of New Zealand BQA/IHS produce. These inspections will be carried out using a 600 unit inspection sample for each grower making up the consignment. All inspection results will be recorded as per Inspection Record at Appendix 3.4 of this Manual.

The maximum time that can be run continuously for New Zealand is a 24 hour process. Therefore each daily run must be considered as one lot and all grower inspections must be undertaken on that day. A grower run cannot be continued over into a new day.

For packinghouses located in areas which are declared free of fruit fly, inspection staff must cut any fruits which are considered suspect (soft fruits, bruised or rot spots) and the results of the cutting will be recorded.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation and if so if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

6.4 Security and Supervision Responsibilities

Where a packinghouse has been delegated and accepted exporter responsibilities in accordance with directions contained in Section 9.9 of this Manual the packinghouse must undertake and record all functions so delegated to them and which may include the following;

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporters delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and/or Export Permit (EX 28).

6.5 Packinghouse Audits

AQIS will audit all packinghouses involved in BQA/HIS listed commodities for compliance with grower names and addresses and allocated numbers/codes, and as appropriate, training of staff in the identification of pests associated with the commodity/ies being packed and where necessary identification, segregation and security of product whilst on the premises. Records pertaining to all the foregoing aspects will be checked for accuracy.

The frequency of audits of packinghouses will be at the discretion of the SEI in each state but there will be a minimum of one audit per packing season and where seasons are longer than 4 months, it is recommended a second audit should be scheduled each year.

6.5.1 Application for Registration

An initial audit will be performed prior to the commencement of the season for the purposes of ensuring that the packinghouse has systems in place that will meet the identification, segregation, inspection, security (and where applicable treatments) and recording requirements of the New Zealand BQA/IHS.

At least one additional audit will be undertaken during the packing season.

6.5.2 Continued Registration

At least one audit will be performed during the packing season.

Additional audits may be performed, where as a result of an earlier audit, non-conformances were detected and a reappraisal of the systems following corrective action may be considered necessary.

6.6 Suspension of Packinghouse Registration

AQIS may impose suspension of a packinghouse packing Quarantine Risk Group 2 pest list commodities should the packinghouse be found to be not performing its responsibilities in the required manner. Depending on the reasons for invoking suspension, such suspension may only affect trade for the New Zealand BQA/IHS and not other markets.

Packinghouses who do not have sufficiently trained staff, appropriate segregation and security and identification procedures, or detailed records of their New Zealand packing arrangements, may be subject to suspension.

SECTION 7. CERTIFICATION ASSURANCE ARRANGEMENTS - PACKINGHOUSE RESPONSIBILITIES

7.1 General Requirements

All fruits/vegetables for the New Zealand export trade must include grower numbers or equivalent codes and packinghouse numbers of each individual package. It is the exporters responsibility to ensure that the exporter name and address is on all packages.

Packinghouses located in areas declared to be free of fruit flies must have a register of all growers names and addresses and allocated grower numbers for all suppliers of New Zealand BQA/HIS commodities.

Should packinghouses located in fruit fly area freedom districts become involved in area freedom suspension zones, those packinghouses must be able to provide grower registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals must then have procedures for identification, segregation and packing processes to ensure “area free” fruits cannot be contaminated whilst on the establishment and/or surrounds.

It is recommended that packing establishments have contingency plans within their quality manuals to address additional procedures that would be required in the event of fruit fly outbreaks in their district. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

Packinghouses who have Certification Assurance Arrangements with AQIS may incorporate the required New Zealand systems into their Quality Manuals and be audited simultaneously with normal auditing requirements.

Packinghouses which have accredited CA Arrangements in place and who are packing commodities which do not have any Quarantine Risk Group 2 or 3 pests, and are not undertaking official disinfestation treatments, will not need to add any additional systems to their Quality Manuals.

However, packinghouses with CA Arrangements and which are packing commodities with Quarantine Risk Group 2 or 3 pests listed, will need to ensure that the quality systems, procedures and management ensures, that grower registration, commodity segregation, identification and inspections are performed to meet the New Zealand certification requirements. It is likely that some CA Quality Assurance Manuals will need to either be amended or have attached an Appendix to meet the new export requirements for New Zealand BQA/IHS commodities.

Packinghouses which are seeking CA accreditation for the New Zealand BQA/HIS, must have 5 joint inspections (packinghouse – AQIS) to assess packinghouse inspection staff to undertake inspections for New Zealand in accordance with the directions contained in this Manual and before CA accreditation can be given.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

7.1.1 Auditing for New Zealand Requirements

CA accredited packinghouses who incorporate BQA/IHS commodity responsibilities within their current Quality Manuals will be subject to normal audit regimes which will incorporate any specific New Zealand requirements.

CA accredited packinghouses who wish to leave specific New Zealand BQA/IHS requirements outside their other CA accreditation will have the two systems audited separately but within the usual audit schedules that apply to that establishment.

Packinghouses which have responsibility for registering growers and ensuring adequate field control monitoring and spray diaries are properly maintained for specific Quarantine Risk Group 2 pests, will have a percentage of those registered growers audited at the packinghouse schedule audits to ensure compliance with the New Zealand BQA/IHS is in effect.

Where required, packinghouses who elect to register growers of commodities of Quarantine Risk Group 2 pests, must also conduct audits of all their registered growers in the following manner;

. on initial registration
. following registration at least once during the growing season and
. in subsequent seasons, once during each growing season.

During AQIS CA audits, auditors will perform random audits of growers who are required to be registered under the BQA/IHS on the following basis;

. in the initial year of registration - 5% of all growers registered by the packinghouse
. subject to compliance with all requirements the previous year - reduce to 2 1/2% of all growers registered by the packinghouse or
. if nonconformances were detected at a previous audit - increase random selection of growers to 10% of all registered growers of that packinghouse.

Should a major nonconformance with the New Zealand BQA/IHS and the instructions contained in this Manual be detected at audit, the packinghouse will be suspended from the New Zealand trade in fruit fly host material immediately and depending on the type of nonconformance, suspension from the AQIS CA Arrangement may be considered. Such a decision will be given through the AQIS CA Contact Officer in that State in conjunction with State Regional Manager and Canberra Office.

7.1.2 CA - New Zealand Inspection Requirements

As most CA Arrangements are based on "in-line" process controls rather than "endpoint" inspection regimes, CA packinghouses are permitted to undertake the required inspection regimes as a "in-line" processes.

In-line inspection systems will be granted where the CA establishment has systems in place that;

. address grower field controls (horticulture extension officers, reference to crop monitors etc.), and
. have some form of formal receival inspection records,
. within the processing line have sorter and grader recording systems..

In order to properly document the required inspection for the New Zealand BQA/IHS, CA packinghouses will undertake "in-line" consignment line inspections according to the following;

TABLE 7

DETERMINING SAMPLE REQUIREMENTS
ACCREDITED AQIS CA ESTABLISHMENTS
IN-LINE PROCESS CONTROL

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 7 sets out possible sampling regimes that can be applied as in-line process controls within an accredited CA packing establishment. The maximum time that can be run continuously for New Zealand is a 24 hour process. It is extremely important that records showing this type of in-line process control are maintained for each consignment run for the New Zealand protocol.

All inspections undertaken as indicated in Table 7 must be undertaken by the Senior Quality Control Officer. Where inspections are performed as per Table 7, these are consignment line inspections and individual grower line inspections are not required.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation and if so if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

Packinghouses can make up any type of sampling system based on the above table but it is important to document exactly what regime is to be used before the production run is commenced and that the sampling regime is representative of the consignment/s being assembled.

The packinghouse requirements covered in Section 6 of this Manual pertaining to identification, segregation, security and records for all New Zealand destined produce must be part of the Quality Assurance Manuals submitted to AQIS for approval.

7.2 Documentation

The identity of the exporter in addition to the grower and packinghouse numbers will be included on all packages covered by the BQA/IHS.

For all product that is being transferred intrastate or interstate the following documentation will be required to ensure that the receiving company and AQIS inspector can verify the security and integrity of a consignment on arrival.

A declaration to the following effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not be exceeded."

Where a phytosanitary certificate is to be signed in other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

7.3 Post treatment Security

Where a CA packinghouse has accepted an exporter delegation for the security and loading supervision of BQA/HIS commodities the packinghouse will the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporters delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and laoding company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28).

SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES

8.1 Registration

In addition to normal AQIS registration requirements under the Export Control Act, all establishments who undertake either physical or chemical treatments for the disinfestation of fruit flies for export of host commodities to New Zealand, must be registered specifically for this purpose. Application for registration will be made directly to AQIS Regional Offices in the State where registration is required.

8.2 Process Controls

All treatment centres which are registered for the New Zealand BQA trade must have a system of process control and record keeping which can be audited at all times.

Treatment centres must have systems which demonstrate identification, segregation, process controls, separation of treated and untreated fruits, quarantine secure areas or quarantine secure packaging following treatment and supervision responsibilities when loading produce either direct to export or through exporters/freight forwarders.

Persons who are responsible for calibrating, measuring and recording will be appropriately trained to be able to undertake these responsibilities and understand there importance.

8.3 BQA Treatments - AQIS Supervision

Treatment centres will be subject to the following AQIS supervision during treatments;

8.3.1 Fumigation Centres

Where fumigation is being performed with the use of flexible tents, AQIS inspection staff will attend each fumigation which is being undertaken for the New Zealand BQA. AQIS will attend the treatment centre either at commencement of the treatment to be carried out or prior to the completion of the fumigation. AQIS officers will verify treatment dosages, calculations and gas retention general process controls for each fumigation treatment.

Treatment centres which are using fixed capacity fumigations (chambers of fixed tents), will be audited at the first fumigation treatment being performed for the New Zealand trade and then if substantial compliance is being effected 2 - 3 times during the season.

Fumigation centres must advise their local AQIS office, 24 hours in advance of intended fumigation treatments. If it is difficult for AQIS to be in attendance at the required times, arrangements will be made between the treatment centre and the local AQIS office which will enable the treatment to go ahead but define how AQIS will manage the required supervision requirements.

8.3.2 Cold Storage Centres

AQIS inspection staff will undertake supervision of each cold disinfestation treatment. In normal circumstances AQIS will be required to be in attendance when sensors and probes are calibrated both prior to and at the completion of each treatment. Inspection staff will also attend the cold disinfestation treatment centre once during the disinfestation period (normally about halfway through), to ensure that temperature recording is being maintained in the required manner.

Where cold disinfestation treatments are being undertaken using manual recording devices, AQIS inspection staff will attend for monitoring purpose at that treatment centre every 3-4 days during the treatment/s being undertaken.

8.3.3 Dimethoate Treatments

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment however, AQIS inspection staff will undertake analysis of chemical dipping strengths on the following basis;

. during the first year of a treatment centres registration,

- each month

. where registration has been continuous and without a nonconformance,

- twice during the treatment season.

In addition to the above AQIS analysis, treatment centres who undertake dimethoate dipping/spraying, will be required to have monthly analysis of the dipping strengths by a recognised agency. Results of these analysis will be retained and made available to AQIS authorised officers when requested.

8.4 AQIS Audits of Treatment Centres

AQIS will conduct audits of treatment centres on the following basis;

Fumigation Centres

One annual audit during the first 10 days of each season (to be conducted during a treatment) to verify that treatment centre operators are trained in their responsibilities and know what information is required to be recorded.

Cold Storage Centres

One annual audit during the first three treatments of each season to verify that all treatment centre responsibilities are being maintained.

Dimethoate Treatment Centres

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained and in the first year of operation, monthly audits during the operating season. For

treatment centres who have undertaken successful audits in the first year, two audits per year/season thereafter as long as compliance with the New Zealand requirements is being maintained.

All Treatment Centres

Should non-conformances be detected during audit schedules covered above, additional audits maybe required to ensure corrective actions have been implemented.

Should major non-conformances be detected during audit, the treatment centre maybe suspended from the New Zealand BQA/IHS trade until AQIS is satisfied corrective action has been implemented and that systems are established to ensure that the nonconformance will not reocccur.

SECTION 9. EXPORTER RESPONSIBILITIES

9.1 Registration Requirements

All exporters of BQA/IHS products to New Zealand must be registered with AQIS for this purpose. Exporter applications will be made to the AQIS State Office where the exporters business is conducted.

Applications for registration will include details of the commodities and treatment pathways (where it is known) that the exporter intends to use to meet with the conditions stipulated for export of those commodities to New Zealand.

Applications for registration where, details of the treatment centres are at that time unknown, will be accepted by AQIS but exports of that/those commodities will not be permitted until the exporter advises AQIS of the treatment centres for those commodities that registration is being made for becomes known.

9.2 Exporter Responsibilities

Whilst exporters can delegate some duties, the exporter will remain responsible for all activities which pertain to the inspection, security and loading of product following treatment.

Exporters must ensure at all times:

. either directly or by delegation, that product security during loading, transporting and export consignment consolidation is not compromised and that there can be no substitution or cross infestation of product following treatment,

. that exporters inspection requirements (either exporter or exporter delegate) as detailed in this Manual, are performed by staff that are qualified to do so and that records are kept for all inspections performed,

. ensure inspection records are presented for each grower lot presented for AQIS inspection,

. must liaise with AQIS/State Officers as necessary to advise of product movement and inspection requirements,

. are responsible for all documentation including phytosanitary certificate endorsements that are required for product to enter New Zealand.

9.3 Exporter Inspection

Where grower line inspections are performed by the Exporter, full details of the inspection performed will be recorded.

Inspections will only be undertaken following completion of the disinfestation treatments.

All Exporter inspections will be performed at the 600* unit rate and all units within the sample will be inspected.

NOTE Inspections can be carried out to other sampling sizes, as per the sampling plans in Section 1 if desired.

Exporters will ensure that all staff undertaking inspection duties are properly trained in pest and weed seed identification for the pests and weedseeds which are of a quarantine concern to New Zealand.

During exporter inspections, any soft, bruised or rot spot fruits will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation and if so that all larvae are dead. The results of all fruits which are cut will be recorded on the inspection sheets.

A copy of the "Inspection Record" together with other documentation relating to the shipment will be held on file for 2 years and be subject to AQIS/MAF audit.

9.4 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections, exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed including any that may not have been forwarded to New Zealand. ie. sold on the domestic or other export markets. New Zealand will inspect as individual consignments on arrival.

Each such procedure must have AQIS approval before implementation.

NOTE: The "split consignment" procedures cannot be implemented until the Senior Inspector has approved that the necessary documentation and record keeping is satisfactory and auditable.

This procedure will allow one inspection at the fee for service rate and the first phytosanitary certificate free. All subsequent phytosanitary certificates both originals or certified copies will be charged for at the rate determined in the Fees Orders.

For split consignments where exporters/importers want to reduce the MAF on arrival inspection, exporters must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

. notification of consignment details to MAF as they occur,

. the New Zealand communication links (importer and MAF contacts),

. flow chart detailing how the phytosanitary certificate moves through the system.

9.5 Untreated Produce being forwarded from Country Areas

Growers/Packinghouses who are forwarding untreated Risk Group 2 fruits from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate, signed by an authorised AQIS officer), or a signed copy of an EX 28 Notice of Intention to Export or, a grower declaration form, attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide Notice of Intention to Export (EX 28) and any other relevant documentation to AQIS, prior to any AQIS inspection being undertaken.

9.6 Delegation of Inspection

Where responsibility for the export inspection is delegated to another party, this will be done in writing with the delegate acknowledging in writing, their responsibilities in so accepting the delegation. Copies of documentation for delegation and acceptance of these duties will be held on both companies filing systems.

Where the exporter has delegated the Exporter Inspection requirements, the delegated inspection person will perform individual 600 unit (or equivalent) consignment line inspections regardless of any "in-line quality control" inspections that may have been undertaken and recorded.

NOTE Accredited AQIS CA establishments are not required to undertake end-point inspections where their quality systems give procedures for a 600 unit inspection to be completed in-line and where the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

Any person/s who are delegated the responsibility for undertaking exporter inspections must have the ability to identify those pests and weedseeds that are of a quarantine concern to New Zealand.

All inspections whether by exporter staff or delegated persons will be performed in an area with a minimum light of 600 lux and include the use of magnifying lens x10 where appropriate.

Inspection procedures must include cutting of damaged fruits as detailed at Section 9.3 of this Manual. Records of all fruits/vegetable cut will be recorded on the inspection sheets.

All inspections performed by exporter or delegated persons will be recorded on an "Inspection Record" and held on file by that exporter/delegate. A copy of this record must be presented with the line/lot for AQIS inspection.

9.7 Documentation

The identity of the exporter in addition to the grower and packinghouse numbers will be included on all packages covered by the BQA/IHS.

A declaration to this effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not be exceeded."

9.8 Procedures for Exporter Rejected Produce

Should an exporter or exporters' delegate during inspection of produce, detect live fruit fly infestation in any grower lot, all produce from that grower lot (even if previously passed but not shipped), will be securely segregated from all other NZ BQA produce and identified as not suitable for export to New Zealand.

Exporter or exporters' delegate is responsible for immediately notifying the AQIS officers in the region of the detection, the grower involved and details of the treatment centre who performed the disinfestation treatment (for treated produce only), and what action they are taking to ensure there is no cross contamination of other BQA/IHS produce.

AQIS Senior Export Inspector in that State will formally advise the treatment centre of the possible treatment failure and that the centre will be suspended pending an audit of the treatment. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the detection of live fruit fly, reinstatement of the treatment centre for the New Zealand trade may be permitted.

Should during exporter inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS officers in that region of the detection. The fruit must be immediately identified as failed for NZ and segregated from all other New Zealand destined fruits/vegetables.

AQIS inspection staff must notify the grower of this produce of the failure and the grower will be placed on suspension and subject to an audit of his property to learn the reason for failure. If the audit identifies nonconformances but which can be corrected immediately, consideration will be given to allow the grower to take those corrective actions and be reinstated for the New Zealand program.

9.9 Post treatment Security

An exporter will nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporters delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and laoding company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28) and is to be faxed through to the AQIS office in the originating area/location..

9.10 Security of Produce - Exporter/Freight Forwarder Premises

Treated produce on arrival at exporters' premise or Freight Forwarder Depot, will be inspected by AQIS officers to ensure that the security of the consignment is intact. Inspectors will ensure that the produce is in a secure/safe condition (no tearing of shrinkwrap or mesh bags) and that documentation is correct with contents of the load and is accompanied (if required) by a treatment certificate.

Export shipping or airfreight containers will be inspected by freight forwarding agent or exporter for cleanliness and condition, (any holes in container will be taped over). Details of container, and its soundness and cleanliness will be recorded on "Container Report Sheet" Appendix 3.12 and signed by the Exporter/Airfreight Forwarding Agent.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

9.11 Audits - Exporters

AQIS will perform an audit of all exporters registered for the New Zealand program annually. All relevant documentation for all consignments must be made available to the AQIS authorised Officer.

9.12 Audits -Exporters Delegate

A minimum of two audits per year will be conducted by AQIS on persons with exporter delegate responsibilities.

9.13 Exporter/Exporter Delegate - Non Compliance

An Exporter/Exporter Delegate may be suspended from the BQA/IHS if they are not meeting their obligations under the BQA/IHS. Non-compliance includes :

. failing to provide up to date and correct documentation, including Inspection Records for New Zealand destined product
. failing to correctly draw and sample product

. failing to appropriately train (or be trained), Quality Control inspectors for the purposes of inspecting BQA/IHS product
. failing to segregate BQA/IHS treated/passed for export product from non treated product
. failing to fulfil any other requirement/responsibility as outlined in this section of the Manual.

Additional audits (scheduled by the SI (Exports)) will be scheduled where an audit reveals non-conformities occurring within the exporter/exporter delegate responsibilities

The exporter/exporter delegate audit costs will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made between AQIS and the parties involved.

SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES

10.1 Fruit Fly Area Freedom - Management Requirements

10.1.1 Area Freedom - Fruit Flies

For the purpose of the BQA/IHS Arrangement, area freedom from fruit flies is recognised as a treatment. All components of the appendices under the Arrangement are applicable to produce grown in areas free of fruit flies with the treatment being area freedom rather than fumigation, cold disinfestation, etc.

Areas considered to be free of fruit flies, unless a current outbreak is declared in the area are;

. Tasmania
. Riverland area of South Australia surrounding the towns/cities of Murtho Renmark, Loxton, Berri, Barmera, Waikerie, Cadell and the township of Mypolonga.
. Sunraysia District of Victoria surrounding the towns/cities of Mildura, Merbein, Nangiloc/Colignan, Robinvale, Nyah and Nyah West, Swan Hill and Barham
. Sunraysia districts of New South Wales surrounding the towns of Dareton, Curlwaa and Coomealla,
. Murrumbidgee Irrigation Area of New South Wales including the towns/cities of Griffith, Leeton and Hillston.

10.1.2 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Surveys to demonstrate that the areas are fruit fly free.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of Fruit Flies and managed under the Tri-state agreement between the States of New South Wales, Victoria and South Australia and

- which reflect the requirements of New Zealand NASS Standard 158.03.06., the Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

- management and control procedures for each area which have been submitted to and accepted by MAF as meeting all the requirements (or equivalence) with the New Zealand NASS Standard 158.03.06.

Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. These procedures and controls are documented such that they can be readily demonstrated to, and

audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

10.1.3 Outbreak

Area freedom will be assumed unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. one or more larvae or pupae are found in locally grown fruit, or

. two fruit flies are trapped within 400 metres of each other, within a 14-day period.

In this case, area freedom from fruit flies will be suspended until a period, equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of NASS Standard 158.03.06, the suspension period will be reduced to;

- one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site or 30kms should there be two outbreak sites within 5 kms.

State Departments must advise AQIS Canberra Office of any amendments to their management procedures immediately they are intended to be implemented. Canberra Office will forward amendments to these management documents to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (and at least annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable New Zealand NASS Standard 158.03.06..

This Manual at Appendix 2 lists dates of declaration of outbreaks and corresponding generation/dates to assess subsequent reinstatement of area freedom for areas which are subjected to outbreak conditions.

10.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom from fruit flies has been approved), must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency of all traps will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS

11.1 Redback Spiders - *Lactrodectus hasselti*

New Zealand Ministry of Health have declared the pest redback spider, a pest of human health concern and have requested MAF to ensure that all consignments of tablegrapes arriving in New Zealand do not have any live pests of this type.

MAF have directed that AQIS must undertake either stringent field control programs to eliminate this pest in the field or undertake an agreed treatment that is effective against red back spiders. A sulphur dioxide - carbon dioxide fumigation treatment has been accepted for this purpose.

The Australian tablegrape industry have opted for mandatory fumigation.

Fumigation details are;

A mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

Fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide- Carbon Dioxide fumigants.

Section 3 of this Manual details the requirements and responsibilities which fumigation treatment centres must comply with and fumigation applied to tablegrapes must meet the listed criteria.

AQIS inspection staff who are undertaking phytosanitary certification for tablegrapes must sight fumigation treatment records clearly identifying the products treated with dates, time and dose rates nominated together with exporter details (where known) packing establishment and grower numbers details before signing the phytosanitary certificate.

Tablegrape fumigators will be audited for compliance with this Section and Section 3 of this Manual.

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES

AVOCADO

Persea americana

Avocado can be exported to New Zealand under the Area Freedom from Fruit Flies Appendix 1 to the BQA/IHS.

Avocado can also be exported to New Zealand under the Cold Storage disinfestation Treatment Appendix No. 5 of the BQA/IHS.

Growers and packinghouses must be registered to grow and pack avocado for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

-
-
-
avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly

Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper

Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Ascomycota	
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	anthracnose
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis perseae	

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	-

Non-regulated non plant pests/organisms

None

BANANA

Musa spp.

Banana can be exported to New Zealand under the Dimethoate Treatment Appendix No. 4 of the BQA/IHS.

Growers and packers (in addition to treatment centres and exporters) must be registered for this pathway because of the Risk Group 2 pest *Bactrocera musea.*

All bananas must be in hard green condition at the time of AQIS export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera jarvisi	Javis' fruit fly
Bactrocera papayae	papaya fruit fly
Bactrocera tryoni	Queensland fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly

1.2 Banana, *Musa* spp.

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) are allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Chrysomelidae	
Geloptera miracula	chrysomelid beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida discopunctulata	leaf beetle
Curculionidae	
Cosmopolites sordidus	banana root borer
Listroderes difficilis	vegetable weevil
Polytus mellerborgi	weevil borer
Scarabaeidae	
Dermolepida albohirtum	greyback cane beetle
Rhopaea magnicornis	large pasture scarab
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Calliphoa imperialis	blow fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Fabrictilis australis	squash bug
Lygaeidae	
Graptostethus servus	lygaeid bug
Homoptera	
Aleyrodidae	
Aleurodicus spiniferis	coconut whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophyllis	cyanophyllum scale
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Pseudococcidae	
Planococcus pacificus	citrus mealybug
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Lepidoptera	
Lymantriidae	
Orgyia australis	vapourer moth

Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Helicoverpa assulta	cape gooseberry budworm
Hermimia cenoealis	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Lamprosema octasema	banana scab moth
Tirathaba rufivena	fruit borer
Tineidae	
Opogona glycyphaga	sugarcane bud moth
Torticidae	
Isotenes miserana	orange fruitborer
Xenothictis sciaphila	tortricid
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Thysanoptera	
Thripidae	
Chaetanaphothrips signipennis	banana rust thrips
Thrips florum	flower thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phyllocoptruta musae	eriophyid mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Tetranychus marianae	bean mite

1.2 Banana, *Musa* spp.

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia musae (anamorph *Phyllostict musae)*	-
Phyllachorales	
Phyllachoraceae	
Phyllachora musicola	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis musicola	-
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora hayi	-
Deightoniella torulosa	-
Moniliaceae	
Verticillium theobromae	-
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora palmivora	phytophthora fruit rot

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta
Coleoptera
Scarabaeidae
Heteronychus arator — black beetle
Homoptera
Coccidae
Coccus hesperidum — brown soft scale
Diaspididae
Aspidiotus nerii — oleander scale
Hemiberlesia lataniae — latania scale
Pinnaspis aspidistrae — fern scale
Pseudococcidae
Planococcus citri — citrus mealybug
Lepidoptera
Noctuidae
Chrysodeixis eriosoma — green garden looper
Spodoptera litura — cluster caterpillar
Thysanoptera
Thripidae
Hercinothrips bicinctus — banana silvering thrips

Mite

Arachnida
Acarina
Tarsonemidae
Polyhagotarsonemus latus — broad mite
Tenuipalpidae
Brevipalpus californicus — bunch mite
Brevipalpus phoenicis — passionvine mite
Tetranychidae
Tetranychus lambi — strawberry spider mite
Tetranychus urtiae — twospotted spider mite

Fungus

Ascomycota
Microascales
Unknown Microascales
Ceratocystis paradoxa
(anamorph *Chalara paradoxa*)
Unknown Ascomycota
Magnaporthaceae
Magnaporthe grisea
(anamorph *Pyriculara grisea*)

Non-regulated non plant pests/organisms

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under the Area Freedom from Fruit Flies Treatment Appendix 1 of the BQA/IHS.

Citrus fruits can also be exported to New Zealand under the Cold Storage disinfestation Treatment Appendix No. 5 of the BQA/IHS.

The pest Citrus leaf miner whilst listed as a Risk Group 2 pest does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Pest Scientific Name	Common Name
Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle

Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	

Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips

Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	
Merophyas divulsana	lucerne leafroller
Thysanoptera	
Thripidae	

Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida
Acarina
Eriophyidae

Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tenuipalpidae

Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite

Tetranychidae

Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Botryosphaeriaceae

Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Non-regulated non plant pests/organisms

None

GRAPE

Vitis vinifera

Grapes can be exported to New Zealand under Area Feedom from Fruit Flies Appendix 1 of the BQA/IHS and
Grapes can be exported to New Zealand under Cold Storage Treatment Appendix 5 of the BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

Growers and packinghouses must be registered for the grape protocol for the pests/contaminants - weedseeds which are subjected to vineyard hygiene management controls.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterrranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Weed Seeds - Prohibited Species

Baccaris spp
Cenchrus spp (except *C ciliaris*)
Chondrilla juncea - skeleton weed
Cyperus spp (except *C. brevifolius, C. eragrostis, C. esculentus, and C. rotundus*)
Erogrostis curvula - African love grass
Lycium spp. (excepting *L. chinese* and *L. ferocissimum*)

Pennisetum alopecuroides - Chinese pennisetum
Pennisetum macrourum - African feather grass

Phragmites spp.
Solanum elaeagnifolium - Silver leaf nightshade
Sorghum × *almum* - Columbus grass
Sorghum halepense - Johnson grass
Tribules spp. - caltrop

Xanthium spp. (excepting *X. spinosum*)

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Alteica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorihinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala spp.	green scarab beetles
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhococidae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Hymenoptera	
Formicidae	
Componotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	

Agrotis munda	brown cutworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	leafrollers
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips

Mite

Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Spider

Arachnida	
Araneae	
Theridiidae	
Lactrodectus hasselti	Australian red-back spider

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Coccus persicae	grapevine scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Tortiricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothritps haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Colomerus vitis	grape erineum mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus urticae	twospotted spider mite

Non-regulated non plant pests/organisms

None

MANGO
Mangifera indica

The export of Mango to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Aspidiotus destructor	coconut scale
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Ischnaspis longirostris	black thread scale
Phenacaspis dilatata	mango scale
Flatidae	
Colgaroides acuminata	mango planthopper

Lepidoptera	
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Penicillaria jocosatrix	mango shoot caterpillar
Peperita euthysticha	mango tipborer
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Regulated non-quarantine pests

None

Regulated non-plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Sternochetus mangiferae	mango seed weevil
Homoptera	
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite

Non-regulated non plant pests/organisms

None

PAPAYA

Carica papaya

The export of Papaya to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha suspensa	Caribbean fruit fly
Bactrocera cucurbitae	melon fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Homoptera	
Cicadellidae	
Orosius argentatus	brown leafhopper
Diaspididae	
Aonidiella orientalis	oriental yellow scale
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Mite

Arachnida	
Acarina	
Tetranychidae	
Tetranychus desertorum	desert spider mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus phoenicis	passionvine mite

Non-regulated non plant pests/organisms

None

PINEAPPLE
Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarnatine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle

Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla
Unknown Symphyla
Symphylidae
Hanseniella sp. symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetes
Dematiaceae
Thielaviopsis paradoxa
Moniliaceae
Penicillium funiculosum

Bacterium
-
-
Enterobacteriaceae
Erwinia ananas marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None
Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae
Iridomyrmex glaber black house ant
Paratrechina vaga ant
Tapinoma sp. ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin's flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps
Mite	
Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite
Nematode	
Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode

Fungus

Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus

-	
-	
-	
tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	**Common Name**
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

POMEGRANATE
Punica granatum

Pomegranate can be exported to New Zealand under the Area Freedom from Fruit Flies Appendix 1 of the BQA/IHS.

Growers and packinghouses of pomegranate do not need to be specifically registered for the New Zealand program requirements.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Hemiptera	

Lygaeidae	
Oxycarenus arctatus	coon bug
Homoptera	
Aphididae	
Aphis spiraecola	spirea aphid
Lepidoptera	
Pyralidae	
Ectomyelois sp.	carob moth

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Aphididae	
Aphis gossypii	cotton aphid
Aulacorthum circumflexum	mottled arum aphid
Myzus ornatus	ornate aphid
Myzus persicae	green peach aphid

Mite

Arachnida	
Acarina	
Tetranychidae	
Tetranychus spp.	spider mites

Non-regluated non plant pests/organisms

None

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under the Area Freedom from Fruit Fly Appendix 1 to the BQA/IHS.

Strawberries can also be exported to New Zealand under the Mthyl Bromide fumigation Treatment Appendix 3 to the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

1.9 Strawberry, *Fragaria* spp.

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers

Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite bean spider mite
Tetranychus ludeni	
Tetranychus urticae	twospotted spider mite

Myriapod

Diplopode
Julida
Blaniulidae
Blaniulua guttulatus — spotted snake millipede

Mollusc

Gastropoda
Stylommatophora
Helicidae
Helix aspersa — common garden snail
Limacidae
Deroceras panormitanum — brown field slug
Deroceras reticulatum — grey garden slug
Milax gagates — black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Exports of tomatoes to New Zealand can be made under the following Treatments;

The tomato varieties, Floradade, Tristar, Hayslip, Sunny and Duke can be exported under the Dimethoate Treatment Appendix No. 4 to the BQA/IHS.

Tomatoes supplied under the Area Freedom Treatment Appendix No.1 of the BQA/IHS, can be of any variety but the variety name should be included on the phytosanitary certificate although this is not mandatory.

As there are no Risk Group 2 pests listed, growers and packinghouses do not need to be specifically registered for the New Zealand trade. However, packinghouses who are undertaking dimethoate treatments shall be registered with AQIS before packing and treatments can be inspected/supervised.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pest (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

1.10 Tomato, *Lycopersicon esculentum*

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Coccinellidae	
Epilachna sp.	leaf-eating ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	
Antherigona orientalis	muscid fly
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	green stink bug
Plautia affinis	
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Graphognathus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemitptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Lepidoptera	
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanoptera	
Thripidae	
Thrips tabaci	Onion thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tetranychidae	
Tetranychus uricae	two spotted spider mite

Non-regulated non plant pests/organisms

None

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT

DAY LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	01 - Feb	01 - Mar	05 - Mar	27 - Apr
02 - Jan	02 - Feb	02 - Mar	06 - Mar	03 - May
03 - Jan	03 - Feb	03 - Mar	07 - Mar	05 - May
04 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
05 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
06 - Jan	05 - Feb	05 - Mar	09 - Mar	16 - May
07 - Jan	06 - Feb	06 - Mar	11 - Mar	19 - Sep
08 - Jan	07 - Feb	07 - Mar	13 - Mar	25 - Sep
09 - Jan	08 - Feb	08 - Mar	14 - Mar	30 - Sep
10 - Jan	09 - Feb	09 - Mar	16 - Mar	02 - Oct
11 - Jan	10 - Feb	10 - Mar	17 - Mar	04 - Oct
12 - Jan	11 - Feb	11 - Mar	18 - Mar	06 - Oct
13 - Jan	12 - Feb	12 - Mar	19 - Mar	08 - Oct
14 - Jan	13 - Feb	13 - Mar	20 - Mar	10 - Oct
15 - Jan	14 - Feb	14 - Mar	21 - Mar	11 - Oct
16 - Jan	15 - Feb	15 - Mar	23 - Mar	11 - Oct
17 - Jan	16 - Feb	16 - Mar	25 - Mar	12 - Oct
18 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
19 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
20 - Jan	19 - Feb	19 - Mar	30 - Mar	18 - Oct
21 - Jan	20 - Feb	20 - Mar	02 - Apr	23 - Oct
22 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
23 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
24 - Jan	23 - Feb	23 - Mar	04 - Apr	25 - Oct
25 - Jan	24 - Feb	24 - Mar	07 - Apr	28 - Oct
26 - Jan	25 - Feb	25 - Mar	09 - Apr	29 - Oct
27 - Jan	26 - Feb	26 - Mar	11 - Apr	31 - Oct
28 - Jan	27 - Feb	27 - Mar	12 - Apr	01 - Nov
29 - Jan	28 - Feb	28 - Mar	14 - Apr	02 - Nov
30 - Jan	02 - Mar	30 - Mar	17 - Apr	04 - Nov
31 - Jan	03 - Mar	31 - Mar	21 - Apr	07 - Nov
01 - Feb	04 - Mar	01 - Apr	23 - Apr	08 - Nov
02 - Feb	05 - Mar	02 - Apr	27 - Apr	10 - Nov
03 - Feb	06 - Mar	03 - Apr	03 - May	13 - Nov
04 - Feb	07 - Mar	04 - Apr	05 - May	13 - Nov
05 - Feb	08 - Mar	05 - Apr	14 - May	15 - Nov
06 - Feb	09 - Mar	06 - Apr	16 - May	16 - Nov
07 - Feb	11 - Mar	08 - Apr	19 - Sep	23 - Nov
08 - Feb	13 - Mar	10 - Apr	25 - Sep	25 - Nov

2.1 Sunraysia district

09 - Feb	14 - Mar	11 - Apr	30 - Sep	27 - Nov
10 - Feb	16 - Mar	13 - Apr	02 - Oct	28 - Nov
11 - Feb	17 - Mar	14 - Apr	04 - Oct	29 - Nov
12 - Feb	18 - Mar	15 - Apr	06 - Oct	29 - Nov
13 - Feb	19 - Mar	16 - Apr	08 - Oct	30 - Nov
14 - Feb	20 - Mar	17 - Apr	10 - Oct	01 - Dec
15 - Feb	21 - Mar	18 - Apr	11 - Oct	02 - Dec
16 - Feb	23 - Mar	20 - Apr	11 - Oct	02 - Dec
17 - Feb	25 - Mar	22 - Apr	12 - Oct	02 - Dec
18 - Feb	27 - Mar	24 - Apr	14 - Oct	03 - Dec
19 - Feb	28 - Mar	25 - Apr	14 - Oct	03 - Dec
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22 - Feb	03 - Apr	01 - May	24 - Oct	09 - Dec
23 - Feb	04 - Apr	02 - May	25 - Oct	09 - Dec
24 - Feb	04 - Apr	02 - May	25 - Oct	09 - Dec
25 - Feb	07 - Apr	05 - May	28 - Oct	11 - Dec
26 - Feb	09 - Apr	07 - May	29 - Oct	11 - Dec
27 - Feb	11 - Apr	09 - May	31 - Oct	13 - Dec
28 - Feb	12 - Apr	10 - May	01 - Nov	14 - Dec
01 - Mar	14 - Apr	12 - May	02 - Nov	14 - Dec
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01 - Apr	20 - Oct	17 - Nov	06 - Dec	10 - Jan

2.1 Sunraysia district

02 - Apr	21 - Oct	18 - Nov	06 - Dec	10 - Jan
03 - Apr	23 - Oct	20 - Nov	07 - Dec	10 - Jan
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2.1 Sunraysia district

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26 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
27 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
28 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
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31 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
01 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
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22 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
23 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan

2.1 Sunraysia district

24 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
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12 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
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18 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
19 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
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21 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
22 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
23 - Sep	24 - Nov	22 - Dec	30 - Dec	31 - Jan
24 - Sep	24 - Nov	22 - Dec	30 - Dec	31 - Jan
25 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
26 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
27 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
28 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
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30 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
01 - Oct	27 - Nov	25 - Dec	01 - Jan	02 - Feb
02 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
03 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
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10 - Oct	01 - Dec	29 - Dec	06 - Jan	06 - Feb
11 - Oct	01 - Dec	29 - Dec	06 - Jan	06 - Feb
12 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb
13 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb

2.1 Sunraysia district

14 - Oct	03 - Dec	31 - Dec	07 - Jan	07 - Feb
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03 - Dec	06 - Jan	03 - Feb	06 - Feb	11 - Mar

2.1 Sunraysia district

04 - Dec	07 - Jan	04 - Feb	07 - Feb	13 - Mar
05 - Dec	08 - Jan	05 - Feb	08 - Feb	14 - Mar
06 - Dec	09 - Jan	06 - Feb	09 - Feb	16 - Mar
07 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
08 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
09 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
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16 - Dec	17 - Jan	14 - Feb	17 - Feb	27 - Mar
17 - Dec	17 - Jan	14 - Feb	17 - Feb	27 - Mar
18 - Dec	18 - Jan	15 - Feb	17 - Feb	27 - Mar
19 - Dec	19 - Jan	16 - Feb	19 - Feb	30 - Mar
20 - Dec	21 - Jan	18 - Feb	21 - Feb	03 - Apr
21 - Dec	22 - Jan	19 - Feb	21 - Feb	03 - Apr
22 - Dec	23 - Jan	20 - Feb	23 - Feb	04 - Apr
23 - Dec	23 - Jan	20 - Feb	23 - Feb	04 - Apr
24 - Dec	25 - Jan	22 - Feb	25 - Feb	09 - Apr
25 - Dec	25 - Jan	22 - Feb	25 - Feb	09 - Apr
26 - Dec	26 - Jan	23 - Feb	26 - Feb	11 - Apr
27 - Dec	28 - Jan	25 - Feb	28 - Feb	14 - Apr
28 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
29 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
30 - Dec	30 - Jan	27 - Feb	03 - Mar	21 - Apr
31 - Dec	31 - Dec	28 - Feb	04 - Mar	23 - Apr

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	03 - Feb	03 - Mar	11 - Mar	19 - Oct
02 - Jan	04 - Feb	04 - Mar	12 - Mar	19 - Oct
03 - Jan	05 - Feb	05 - Mar	13 - Mar	19 - Oct
04 - Jan	06 - Feb	06 - Mar	15 - Mar	20 - Oct
05 - Jan	07 - Feb	07 - Mar	16 - Mar	21 - Oct
06 - Jan	08 - Feb	08 - Mar	18 - Mar	24 - Oct
07 - Jan	09 - Feb	09 - Mar	19 - Mar	24 - Oct
08 - Jan	11 - Feb	11 - Mar	22 - Mar	27 - Oct
09 - Jan	12 - Feb	12 - Mar	25 - Mar	29 - Oct
10 - Jan	13 - Feb	13 - Mar	27 - Mar	31 - Oct
11 - Jan	14 - Feb	14 - Mar	30 - Mar	03 - Nov
12 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
13 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
14 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
15 - Jan	16 - Feb	16 - Mar	04 - Apr	06 - Nov
16 - Jan	17 - Feb	17 - Mar	07 - Apr	09 - Nov
17 - Jan	18 - Feb	18 - Mar	09 - Apr	10 - Nov
18 - Jan	19 - Feb	19 - Mar	11 - Apr	11 - Nov
19 - Jan	20 - Feb	20 - Mar	14 - Apr	13 - Nov
20 - Jan	22 - Feb	22 - Mar	18 - Apr	16 - Nov
21 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
22 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
23 - Jan	24 - Feb	24 - Mar	23 - Apr	18 - Nov
24 - Jan	25 - Feb	25 - Mar	02 - May	21 - Nov
25 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
26 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
27 - Jan	01 - Mar	29 - Mar	27 - Sep	01 - Dec
28 - Jan	02 - Mar	30 - Mar	30 - Sep	02 - Dec
29 - Jan	03 - Mar	31 - Mar	02 - Oct	03 - Dec
30 - Jan	04 - Mar	01 - Apr	05 - Oct	05 - Dec
31 - Jan	05 - Mar	02 - Apr	09 - Oct	07 - Dec
01 - Feb	06 - Mar	03 - Apr	10 - Oct	07 - Dec
02 - Feb	08 - Mar	05 - Apr	13 - Oct	09 - Dec
03 - Feb	10 - Mar	07 - Apr	19 - Oct	10 - Dec
04 - Feb	11 - Mar	08 - Apr	19 - Oct	10 - Dec
05 - Feb	12 - Mar	09 - Apr	19 - Oct	10 - Dec
06 - Feb	13 - Mar	10 - Apr	19 - Oct	10 - Dec
07 - Feb	15 - Mar	12 - Apr	20 - Oct	11 - Dec
08 - Feb	16 - Mar	13 - Apr	21 - Oct	11 - Dec
09 - Feb	18 - Mar	15 - Apr	24 - Oct	12 - Dec
10 - Feb	19 - Mar	16 - Apr	24 - Oct	12 - Dec
11 - Feb	20 - Mar	17 - Apr	25 - Oct	13 - Dec
12 - Feb	22 - Mar	19 - Apr	27 - Oct	15 - Dec
13 - Feb	25 - Mar	22 - Apr	29 - Oct	16 - Dec

2.2 Riverland district

14 - Feb	27 - Mar	24 - Apr	31 - Oct	17 - Dec
15 - Feb	30 - Mar	27 - Apr	03 - Nov	19 - Dec
16 - Feb	31 - Mar	28 - Apr	04 - Nov	20 - Dec
17 - Feb	04 - Apr	02 - May	06 - Nov	21 - Dec
18 - Feb	07 - Apr	05 - May	09 - Nov	23 - Dec
19 - Feb	09 - Apr	07 - May	10 - Nov	24 - Dec
20 - Feb	11 - Apr	09 - May	11 - Nov	24 - Dec
21 - Feb	14 - Apr	12 - May	13 - Nov	25 - Dec
22 - Feb	15 - Apr	13 - May	14 - Nov	26 - Dec
23 - Feb	18 - Apr	16 - May	16 - Nov	28 - Dec
24 - Feb	21 - Apr	19 - May	17 - Nov	28 - Dec
25 - Feb	23 - Apr	21 - May	18 - Nov	29 - Dec
26 - Feb	02 - May	30 - May	21 - Nov	31 - Dec
27 - Feb	05 - May	02 - Jun	22 - Nov	31 - Dec
28 - Feb	08 - Sep	06 - Oct	27 - Nov	05 - Jan
01 - Mar	21 - Sep	19 - Oct	29 - Nov	07 - Jan
02 - Mar	27 - Sep	25 - Oct	01 - Dec	08 - Jan
03 - Mar	30 - Sep	28 - Oct	02 - Dec	09 - Jan
04 - Mar	02 - Oct	30 - Oct	03 - Dec	09 - Jan
05 - Mar	05 - Oct	02 - Nov	05 - Dec	11 - Jan
06 - Mar	09 - Oct	06 - Nov	07 - Dec	13 - Jan
07 - Mar	10 - Oct	07 - Nov	07 - Dec	13 - Jan
08 - Mar	12 - Oct	09 - Nov	08 - Dec	13 - Jan
09 - Mar	13 - Oct	10 - Nov	09 - Dec	14 - Jan
10 - Mar	15 - Oct	12 - Nov	09 - Dec	14 - Jan
11 - Mar	19 - Oct	16 - Nov	10 - Dec	15 - Jan
12 - Mar	19 - Oct	16 - Nov	10 - Dec	15 - Jan
13 - Mar	19 - Oct	16 - Nov	10 - Dec	15 - Jan
14 - Mar	19 - Oct	16 - Nov	10 - Dec	15 - Jan
15 - Mar	19 - Oct	16 - Nov	10 - Dec	15 - Jan
16 - Mar	20 - Oct	17 - Nov	11 - Dec	17 - Jan
17 - Mar	21 - Oct	18 - Nov	11 - Dec	17 - Jan
18 - Mar	23 - Oct	20 - Nov	12 - Dec	18 - Jan
19 - Mar	24 - Oct	21 - Nov	12 - Dec	18 - Jan
20 - Mar	24 - Oct	21 - Nov	12 - Dec	18 - Jan
21 - Mar	25 - Oct	22 - Nov	13 - Dec	18 - Jan
22 - Mar	26 - Oct	23 - Nov	14 - Dec	19 - Jan
23 - Mar	27 - Oct	24 - Nov	15 - Dec	20 - Jan
24 - Mar	27 - Oct	24 - Nov	15 - Dec	20 - Jan
25 - Mar	28 - Oct	25 - Nov	15 - Dec	20 - Jan
26 - Mar	29 - Oct	26 - Nov	16 - Dec	20 - Jan
27 - Mar	30 - Oct	27 - Nov	16 - Dec	20 - Jan
28 - Mar	31 - Oct	28 - Nov	17 - Dec	21 - Jan
29 - Mar	01 - Nov	29 - Nov	17 - Dec	21 - Jan
30 - Mar	03 - Nov	01 - Dec	19 - Dec	22 - Jan
31 - Mar	03 - Nov	01 - Dec	19 - Dec	22 - Jan
01 - Apr	04 - Nov	02 - Dec	20 - Dec	23 - Jan
02 - Apr	04 - Nov	02 - Dec	20 - Dec	23 - Jan
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04 - Apr	06 - Nov	04 - Dec	21 - Dec	24 - Jan
05 - Apr	06 - Nov	04 - Dec	21 - Dec	24 - Jan

2.2 Riverland district

06 - Apr	07 - Nov	05 - Dec	22 - Dec	25 - Jan
07 - Apr	08 - Nov	06 - Dec	22 - Dec	25 - Jan
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10 - Apr	10 - Nov	08 - Dec	24 - Dec	27 - Jan
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12 - Apr	11 - Nov	09 - Dec	24 - Dec	27 - Jan
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15 - Apr	13 - Nov	11 - Dec	25 - Dec	29 - Jan
16 - Apr	14 - Nov	12 - Dec	26 - Dec	30 - Jan
17 - Apr	14 - Nov	12 - Dec	26 - Dec	30 - Jan
18 - Apr	15 - Nov	13 - Dec	27 - Dec	31 - Jan
19 - Apr	16 - Nov	14 - Dec	28 - Dec	01 - Feb
20 - Apr	16 - Nov	14 - Dec	28 - Dec	01 - Feb
21 - Apr	17 - Nov	15 - Dec	28 - Dec	01 - Feb
22 - Apr	17 - Nov	15 - Dec	28 - Dec	01 - Feb
23 - Apr	17 - Nov	15 - Dec	28 - Dec	01 - Feb
24 - Apr	18 - Nov	16 - Dec	29 - Dec	01 - Feb
25 - Apr	18 - Nov	16 - Dec	29 - Dec	01 - Feb
26 - Apr	19 - Nov	17 - Dec	30 - Dec	03 - Feb
27 - Apr	19 - Nov	17 - Dec	30 - Dec	03 - Feb
28 - Apr	19 - Nov	17 - Dec	30 - Dec	03 - Feb
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2.2 Riverland district

27 - May	25 - Nov	23 - Dec	02 - Jan	05 - Feb
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2.2 Riverland district

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2.2 Riverland district

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2.2 Riverland district

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2.2 Riverland district

17 - Dec	20 - Jan	17 - Feb	23 - Feb	21 - Apr
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25 - Dec	27 - Jan	24 - Feb	02 - Mar	30 - Sep
26 - Dec	29 - Jan	26 - Feb	04 - Mar	05 - Oct
27 - Dec	30 - Jan	27 - Feb	05 - Mar	09 - Oct
28 - Dec	31 - Jan	28 - Feb	06 - Mar	10 - Oct
29 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
30 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
31 - Dec	03 - Feb	03 - Mar	11 - Mar	19 - Oct

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	31 - Jan	28 - Feb	10 - Mar	16 - Oct
02 - Jan	02 - Feb	02 - Mar	12 - Mar	18 - Oct
03 - Jan	03 - Feb	03 - Mar	15 - Mar	20 - Oct
04 - Jan	04 - Feb	04 - Mar	16 - Mar	22 - Oct
05 - Jan	05 - Feb	05 - Mar	17 - Mar	22 - Oct
06 - Jan	06 - Feb	06 - Mar	19 - Mar	24 - Oct
07 - Jan	07 - Feb	07 - Mar	22 - Mar	25 - Oct
08 - Jan	08 - Feb	08 - Mar	24 - Mar	27 - Oct
09 - Jan	09 - Feb	09 - Mar	27 - Mar	28 - Oct
10 - Jan	10 - Feb	10 - Mar	28 - Mar	29 - Oct
11 - Jan	11 - Feb	11 - Mar	02 - Apr	31 - Oct
12 - Jan	12 - Feb	12 - Mar	04 - Apr	01 - Nov
13 - Jan	14 - Feb	14 - Mar	10 - Apr	05 - Nov
14 - Jan	15 - Feb	15 -Mar	16 - Apr	08 - Nov
15 - Jan	16 - Feb	16 - Mar	30 - Aug	13 - Nov
16 - Jan	17 - Feb	17 - Mar	11 - Sep	15 - Nov
17 - Jan	18 - Feb	18 - Mar	15 - Sep	16 - Nov
18 - Jan	19 - Feb	19 - Mar	17 - Sep	17 - Nov
19 - Jan	20 - Feb	20 - Mar	22 - Sep	18 - Nov
20 - Jan	21 - Feb	21 - Mar	25 - Sep	20 - Nov
21 - Jan	23 - Feb	23 - Mar	30 - Sep	22 - Nov
22 - Jan	24 - Feb	24 - Mar	02 - Oct	23 - Nov
23 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
24 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
25 - Jan	28 - Feb	28 - Mar	07 - Oct	25 - Nov
26 - Jan	01 - Mar	29 - Mar	07 - Oct	25 - Nov
27 - Jan	03 - Mar	31 - Mar	09 - Oct	25 - Nov
28 - Jan	04 - Mar	01 – Apr	09 – Oct	25 - Nov
29 - Jan	06 - Mar	03 - Apr	12 - Oct	27 - Nov
30 - Jan	07 - Mar	04 - Apr	13 - Oct	28 - Nov
31 - Jan	09 - Mar	06 - Apr	15 - Oct	28 - Nov
01 - Feb	10 - Mar	07 - Apr	16 - Oct	30 - Nov
02 - Feb	11 - Mar	08 - Apr	16 - Oct	30 - Nov
03 - Feb	12 - Mar	09 - Apr	18 - Oct	02 - Dec
04 - Feb	15 - Mar	12 - Apr	20 - Oct	03 - Dec
05 - Feb	16 - Mar	13 - Apr	22 - Oct	04 - Dec
06 - Feb	17 - Mar	14 - Apr	22 - Oct	04 - Dec
07 - Feb	19 - Mar	16 - Apr	24 - Oct	06 - Dec

2.3 MIA

08 - Feb	22 - Mar	19 - Apr	25 - Oct	07 - Dec
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11 - Feb	28 - Mar	25 - Apr	29 - Oct	10 - Dec
12 - Feb	02 - Apr	30 - Apr	31 - Oct	11 - Dec
13 - Feb	04 - Apr	02 - May	01 - Nov	12 - Dec
14 - Feb	08 - Apr	06 - May	03 - Nov	13 - Dec
15 - Feb	10 - Apr	08 - May	05 - Nov	14 - Dec
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17 - Feb	30 - Aug	27 - Sep	13 - Nov	21 - Dec
18 - Feb	11 - Sep	09 -Oct	15 - Nov	23 - Dec
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22 - Feb	25 - Sep	23 - Oct	20 - Nov	26 - Dec
23 - Feb	26 - Sep	24 - Oct	21 - Nov	27 - Dec
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25 - Feb	02 - Oct	30 - Oct	23 - Nov	28 - Dec
26 - Feb	04 - Oct	01 - Nov	24 - Nov	29 - Dec
27 - Feb	05 - Oct	02 - Nov	24 - Nov	29 - Dec
28 - Feb	06 - Oct	03 - Nov	25 - Nov	31 - Dec
01 - Mar	07 - Oct	04 - Nov	25 - Nov	31 - Dec
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07 - Mar	12 - Oct	09 - Nov	27 - Nov	01 - Jan
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28 - Mar	28 - Oct	25 - Nov	09 - Dec	11 - Jan
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2.3 MIA

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27- Aug	12 - Nov	10 - Dec	20 - Dec	21 - Jan
28 - Aug	12 - Nov	10 - Dec	20 - Dec	21 - Jan
29 - Aug	12 - Nov	10 - Dec	20 - Dec	21 - Jan
30 - Aug	12 - Nov	10 - Dec	20 - Dec	21 - Jan
31 - Aug	13 - Nov	11 - Dec	21 - Dec	22 - Jan
01 - Sep	13 - Nov	11 - Dec	21 - Dec	22 - Jan
02 - Sep	13 - Nov	11 - Dec	21 - Dec	22 - Jan
03 - Sep	13 - Nov	11 - Dec	21 - Dec	22 - Jan
04 - Sep	13 - Nov	11 - Dec	21 - Dec	22 - Jan
05 - Sep	13 - Nov	11 - Dec	21 - Dec	22 - Jan
06 - Sep	13 - Nov	11 - Dec	21 - Dec	22 - Jan
07 - Sep	13 - Nov	11 - Dec	21 - Dec	22 - Jan
08 - Sep	13 - Nov	11 - Dec	21 - Dec	22 - Jan
09 - Sep	14 - Nov	12 - Dec	22 - Dec	23 - Jan
10 - Sep	14 - Nov	12 - Dec	22 - Dec	23 - Jan
11 - Sep	15 - Nov	13 - Dec	23 - Dec	24 - Jan
12 - Sep	15 - Nov	13 - Dec	23 - Dec	24 - Jan
13 - Sep	15 - Nov	13 - Dec	23 - Dec	24 - Jan
14 - Sep	15 - Nov	13 - Dec	23 - Dec	24 - Jan
15 - Sep	16 - Nov	14 - Dec	23 - Dec	24 - Jan
16 - Sep	16 - Nov	14 - Dec	23 - Dec	24 - Jan
17 - Sep	17 - Nov	15 - Dec	24 - Dec	25 - Jan
18 - Sep	17 - Nov	15 - Dec	24 - Dec	25 - Jan
19 - Sep	17 - Nov	15 - Dec	24 - Dec	25 - Jan
20 - Sep	17 - Nov	15 - Dec	24 - Dec	25 - Jan
21 - Sep	17 - Nov	15 - Dec	24 - Dec	25 - Jan
22 - Sep	18 - Nov	16 - Dec	25 - Dec	26 - Jan
23 - Sep	18 - Nov	16 - Dec	25 - Dec	26 - Jan
24 - Sep	19 - Nov	17 - Dec	25 - Dec	26 - Jan
25 - Sep	19 - Nov	17 - Dec	25 - Dec	26 - Jan
26 - Sep	20 - Nov	18 - Dec	26 - Dec	27 - Jan
27 - Sep	21 - Nov	19 - Dec	27 - Dec	28 - Jan
28 - Sep	21 - Nov	19 - Dec	27 - Dec	28 - Jan
29 - Sep	21 - Nov	19 - Dec	27 - Dec	28 - Jan
30 - Sep	21 - Nov	19 - Dec	27 - Dec	28 - Jan
01 - Oct	22 - Nov	20 - Dec	28 - Dec	29 - Jan
02 - Oct	22 - Nov	20 - Dec	28 - Dec	29 - Jan
03 - Oct	23 - Nov	21 - Dec	28 - Dec	29 - Jan
04 - Oct	23 - Nov	21 - Dec	28 - Dec	29 - Jan
05 - Oct	24 - Nov	22 - Dec	29 - Dec	30 - Jan

06 - Oct	24 - Nov	22 - Dec	29 - Dec	30 - Jan
07 - Oct	25 - Nov	23 - Dec	31 - Dec	31 - Jan
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09 - Oct	25 - Nov	23 - Dec	31 - Dec	31 - Jan
10 - Oct	25 - Nov	23 - Dec	31 - Dec	31 - Jan
11 - Oct	26 - Nov	24 - Dec	31 - Dec	31 - Jan
12 - Oct	26 - Nov	24 - Dec	31 - Dec	31 - Jan
13 - Oct	27 - Nov	25 - Dec	01 - Jan	02 - Feb
14 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
15 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
16 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
17 - Oct	30 - Nov	28 - Dec	04 - Jan	05 - Feb
18 - Oct	01 - Dec	29 - Dec	04 - Jan	05 - Feb
19 - Oct	02 - Dec	30 - Dec	05 - Jan	06 - Feb
20 - Oct	02 - Dec	30 - Dec	05 - Jan	06 - Feb
21 - Oct	03 - Dec	31 - Dec	06 - Jan	07 - Feb
22 - Oct	04 - Dec	01 - Jan	07 - Jan	08 - Feb
23 - Oct	04 - Dec	01 - Jan	07 - Jan	08 - Feb
24 - Oct	05 - Dec	02 - Jan	07 - Jan	08 - Feb
25 - Oct	06 - Dec	03 - Jan	09 - Jan	10 - Feb
26 - Oct	07 - Dec	04 - Jan	11 - Jan	12 - Feb
27 - Oct	07 - Dec	04 - Jan	11 - Jan	12 - Feb
28 - Oct	08 - Dec	05 - Jan	11 - Jan	12 - Feb
29 - Oct	09 - Dec	06 - Jan	11 - Jan	12 - Feb
30 - Oct	10 - Dec	07 - Jan	12 - Jan	14 - Feb
31 - Oct	10 - Dec	07 - Jan	12 - Jan	14 - Feb
01 - Nov	11 - Dec	08 - Jan	13 - Jan	15 - Feb
02 - Nov	12 - Dec	09 - Jan	14 - Jan	16 - Feb
03 - Nov	12 - Dec	09 - Jan	14 - Jan	16 - Feb
04 - Nov	13 - Dec	10 - Jan	15 - Jan	17 - Feb
05 - Nov	14 - Dec	11 - Jan	16 - Jan	18 - Feb
06 - Nov	14 - Dec	11 - Jan	16 - Jan	18 - Feb
07 - Nov	15 - Dec	12 - Jan	17 - Jan	19 - Feb
08 - Nov	16 - Dec	13 - Jan	18 - Jan	20 - Feb
09 - Nov	16 - Dec	13 - Jan	18 - Jan	20 - Feb
10 - Nov	17 - Dec	14 - Jan	18 - Jan	20 - Feb
11 - Nov	18- Dec	15 - Jan	19 - Jan	21 - Feb
12 - Nov	18- Dec	15 - Jan	19 - Jan	21 - Feb
13 - Nov	20 - Dec	17 - Jan	21 - Jan	24 - Feb
14 - Nov	21 - Dec	18 - Jan	22 - Jan	27 - Feb
15 - Nov	22 - Dec	19 - Jan	23 - Jan	27 - Feb
16 - Nov	23 - Dec	20 - Jan	24 - Jan	28 - Feb
17 - Nov	23 - Dec	20 - Jan	24 - Jan	28 - Feb
18 - Nov	24 - Dec	21 - Jan	25 - Jan	01 - Mar
19 - Nov	25 - Dec	22 - Jan	26 - Jan	03 - Mar
20 - Nov	25 - Dec	22 - Jan	26 - Jan	03 - Mar
21 - Nov	26 - Dec	23 - Jan	27 - Jan	04 - Mar
22 - Nov	27 - Dec	24 - Jan	28 - Jan	06 - Mar

2.3 MIA

23 - Nov	28 - Dec	25 - Jan	29 - Jan	07 - Mar
24 - Nov	28 - Dec	25 - Jan	29 - Jan	07 - Mar
25 - Nov	29 - Dec	26 - Jan	30 - Jan	09 - Mar
26 - Nov	31 - Dec	28 - Jan	31 - Jan	10 - Mar
27 - Nov	31 - Dec	28 - Jan	31 - Jan	10 - Mar
28 - Nov	01 - Jan	29 - Jan	02 - Feb	12 - Mar
29 - Nov	02 - Jan	30 - Jan	03 - Feb	15 - Mar
30 - Nov	03 - Jan	31 - Jan	04 - Feb	16 - Mar
01 - Dec	04 - Jan	01 - Feb	05 - Feb	17 - Mar
02 - Dec	04 - Jan	01 - Feb	05 - Feb	17 - Mar
03 - Dec	05 - Jan	02 - Feb	06 - Feb	19 - Mar
04 - Dec	06 - Jan	03 - Feb	07 - Feb	22 - Mar
05 - Dec	07 - Jan	04 - Feb	08 - Feb	24 - Mar
06 - Dec	07 - Jan	04 - Feb	08 - Feb	24 - Mar
07 - Dec	09 - Jan	06 - Feb	10 - Feb	28 - Mar
08 - Dec	11 - Jan	08 - Feb	12 - Feb	04 - Apr
09 - Dec	11 - Jan	08 - Feb	12 - Feb	04 - Apr
10 - Dec	11 - Jan	08 - Feb	12 - Feb	04 - Apr
11 - Dec	12 - Jan	09 - Feb	14 - Feb	10 - Apr
12 - Dec	13 - Jan	10 - Feb	15 - Feb	16 - Apr
13 - Dec	14 - Jan	11 - Feb	16 - Feb	30 - Aug
14 - Dec	15 - Jan	12 - Feb	17 - Feb	11 - Sep
15 - Dec	16 - Jan	13 - Feb	18 - Feb	15 - Sep
16 - Dec	17 - Jan	14 - Feb	19 - Feb	17 - Sep
17 - Dec	18 - Jan	15 - Feb	20 - Feb	22 - Sep
18 - Dec	18 - Jan	15 - Feb	20 - Feb	22 - Sep
19 - Dec	19 - Jan	16 - Feb	21 - Feb	25 - Sep
20 - Dec	20 - Jan	17 - Feb	23 - Feb	30 - Sep
21 - Dec	21 - Jan	18 - Feb	24 - Feb	02 - Oct
22 - Dec	22 - Jan	19 - Feb	27 - Feb	06 - Oct
23 - Dec	23 - Jan	20 - Feb	27 - Feb	06 - Oct
24 - Dec	24 - Jan	21 - Feb	28 - Feb	07 - Oct
25 - Dec	25 - Jan	22 - Feb	01 - Mar	07 - Oct
26 - Dec	26 - Jan	23 - Feb	03 - Mar	09 - Oct
27 - Dec	27 - Jan	24 - Feb	04 - Mar	09 - Oct
28 - Dec	28 - Jan	25 - Feb	06 - Mar	12 - Oct
29 - Dec	29 - Jan	26 - Feb	07 - Mar	13 - Oct
30 - Dec	30 - Jan	27 - Feb	09 - Mar	15 - Oct
31 - Dec	30 - Jan	27 - Feb	09 - Mar	15 - Oct

APPENDIX 3 FORMS

3.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS		
NAME OF GROWER/S		
GROWER NUMBER (if previously registered)		
POSTAL OR BUSINESS ADDRESS		
	POST CODE	
PROPERTY ADDRESS		
	POST CODE	
REAL PROPERTY DESCRIPTION (of area under planting)		

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operational Manual - Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Capsicums	Banana
Citrus	Tomato	Grapes

Appendix 3.2

3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION

APPLICATION FOR PACKER REGISTRATION
AUSTRALIA - NEW ZEALAND
BILATERAL QUARANTINE ARRANGEMENT

NAME OF PACKER	
REGISTERED EXPORT ESTABLISHMENT NUMBER	

PREMISES ADDRESS

DECLARATION

I/We, ... hereby apply for registration as a packer of .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestries, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests, Australia

I have read the arrangement and the Systems Operational Manual Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE	
WITNESS	

CROP GROUPS

Avocados	Capsicums	Citrus
Grapes	Tomatoes	Banana

Appendix 3.3

3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT
EXPORTER REGISTRATION AND INSPECTION APPLICATION

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Version 3 of the Australian - New Zealand Bilateral Quarantine Arrangement and the BQA Systems Operational Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the BQA and the Systems Operational Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for BQA commodities will provide properly identified Inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection
The following persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Appendix 3.3

Treatment Loading Supervision Authority

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the BQA for and on behalf of this Company.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of BQA commodities as is required by the BQA and the contents of this Manual.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the BQA and the Systems Operation Manual Version 3 of May 1999 required for inspection purposes

Name of Applicant .....

Signature .....
Date .....

3.4 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Date	Trade Description	Tick
Commodity	Commodity	
No of Cartons	Registered Grower No.	
Registered Grower No.	Registered Packing Establishment	
	.....	
Ex 28 Number/s:	Australian Origin	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250	
Exporter/s	(Tick one)	
	Exporter Inspection completed by:.....	
	(a) Exporter	
Inspector Name	(b) Exporter delegate (name)	
(Block Letters)	**Inspected by**:	
.....	Grower Line	
Inspector's Signature	Consignment Line	

Carton Number	Number of Units	Total Units	Category				
			RG3	RG2	RG1	NQ	Remarks
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed **Failed** **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Quarantine Pes

Appendix 3.5

3.5 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND

Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	Number of Cartons/Commodity	Temperatures Taken *

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

Appendix 3.5

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

3.6 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKING HOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0C$.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

3.7 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand that should I/we wish to re-enter the Arrangement protocol at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in block letters Signature Date

....

Voluntary Withdrawal

I/we agree that my/our property is no longer required to be registered under the terms and conditions that are required for the New Zealand export trade for BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand that should I/we wish to re-enter the Arrangement at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in Block letters Signature Date

....

AQIS OFFICE DOCUMENTATION
Fax to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or Inspector's Signature

.....

Appendix 3.8

3.8 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection of the following property/premises:- (Grower - Packer) (delete one)

Name .....
Address .....
.....
.....
Reg No .....

I believe that for the following reasons that the above Grower/Company no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) that they have no intention to correct the above mentioned deficiency in the immediate future.

I hereby declare that the above mentioned grower/packer is suspended from the Australia - New Zealand BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Grower Name	Grower's Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

3.9 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY ALL TOMATO CONSIGNMENTS TO BRISBANE, FROM TOWNSVILLE, BUNDABERG OR CAIRNS

DECLARATION OF TREATMENT

I, ... of .....

.....

hereby declare that the ..... number of tomatoes consigned

to .....on .....(date)

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for minimum period of one minute.

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   (iii) Bananas - dipping in a solution of dimethoate with 500 ppm active ingredient for a minimum period of 30 seconds.

   AND
   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....
   AND
2. nominate a sample size of 600/950/1250* fruits to be inspected from each lot.
   (*Delete as applicable)
   AND
3. further declare that .....(insert name of supervisor) a designated person nominated by .....(insert name of exporter) has supervised the loading of this consignment for transport to .....
   .....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....19.....

Signature ..... Witness .....

3.10 TOMATO VARIETY DECLARATION

TOMATO VARIETY DECLARATION

PRODUCTION OF TOMATOES FOR EXPORT TO NEW ZEALAND

I, ... registered

New Zealand Grower No.....declare the tomatoes supplied

by me on the ..... to .....

are of the variety .....

Signed ..... Dated .....

Appendix 3.11

3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the BQA Systems Operational Manual Version 3 of May 1999 and have the ability to recognise and identify the pests and weed seeds that are contained in the MPL's for quarantine pests.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the BQA and the Instructions contained in the Operations Manual for Australian New Zealand BQA.

Appendix 3.11

Signature .....
Printed Name ..... Date .....

Approved ..... Senior Inspector/Superving Inspector
Date ..... Seal/Stamp .....

3.12 CONTAINER HYGIENE REPORT

CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF CONTAINERS

Date.....

Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28 Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

3.13 STATUTORY DECLARATION

THE OATHS ACTS - 1867-1960

STATUTORY DECLARATION

State to wit .....

I (Name)..... of address.....
in the State of..... do solemnly and sincerely declare that:

Product (name)..... supplied to (exporter/packinghouse, name and address .....
.....have been grown under the AQIS/MAF protocol procedures for export of such produce to New Zealand.

My registered grower number is ..... and is current and the conditions as required by the BQA for growers have been complied with.

The produce aforementioned was loaded under my supervision on the (date).....
and comprised ..... Bins or ..... Tonnes Bulk and was loaded onto registered truck no. ..... and trailer no.....

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of "The Oaths Acts 1867-1960"

.....Signature .....

A Justice of Peace

Appendix 3.14

3.14 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare that the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

nzbqagen/ihsmanlay

31 May 1999

SYSTEMS OPERATIONS MANUAL

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT INCORPORATING THE NEW ZEALAND IMPORT HEALTH STANDARDS AND AQIS OPERATIONS REQUIREMENTS

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES ..... **V**

AMENDMENT RECORD ..... **VII**

GLOSSARY OF TERMS ..... **IX**

DEFINITIONS ..... **X**

INTRODUCTION **1**

SECTION 1. BACKGROUND **1**

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements ***1***

1.2 Scope of the Manual ***2***

SECTION 2. PEST CATEGORIES **1**

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS 1

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS 1

2.1.3 International Phytosanitary Certificate (PIC) Pests - Risk Group 1 - PESTS 2

2.2 Maximum Pest Levels ***2***

SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS **1**

3.1 Country Freedom From Fruit Flies ***1***

3.2 Area Freedom Districts within Australia ***1***

3.2.1 Riverina - MIA 3

3.2.2 Sunraysia - Victoria and New South Wales 3

3.2.3 Riverland - South Australia 3

3.2.4 Commodity Registration Requirements 4

3.2.5 Commodity Security - Area Freedom 5

3.2.6 Phytosanitary Certification Endorsements - Area Freedom Treatments 6

3.3 Methyl Bromide Fumigation ***8***

3.3.1 Fumigation Responsibilities 8

3.3.2 Phytosanitary Certificate Endorsements 11

3.4. Dimethoate Dip/Spray ***12***

3.4.1 Post Treatment Security - Chemical Dipping/Spraying 14

3.4.2 Post Treatment - Transportation of Product to Export Loading Point 15

3.4.3 Phytosanitary Certificate Endorsements 15

3.5 Cold Storage ***16***

3.5.1 Approved Cold Storage Disinfestation Treatments 17

3.5.2 Registration 18

3.5.3 Cold Disinfestation Procedures 18

3.5.4 Temperature Recording 18

3.5.5 Record Requirements 19

3.5.6 Auditing Requirements – Cold Storage Disinfestation Centres 20

3.5.7 Phytosanitary Certificate Endorsements 20

3.6 Non Host Status ***21***

3.6.1 Phytosanitary Certificate Endorsement 22

3.7 Heat Treatments ***23***

3.8 Dimethoate Dipping - Interim Approved Cucurbits ***23***

3.8.1 Dimethoate Treatment Centre Requirements 24

3.8.2 Phytosanitary Certificate Endorsements 24

3.9 Methyl Bromide Fumigation - Interim Approved Product 25
3.9.1 Phytosanitary Certificate Endorsement 26
Attachment 1 to Section 3 – Summary of requirements for access of fruit fly host commodities into New Zealand from Australia 27
SECTION 4. MANAGEMENT RESPONSIBILITIES 1
4.1 AQIS Canberra Office 1
4.2 State Departments of Agriculture (or equivalents) 2
4.3 AQIS State Offices 2
4.3.1 Registration Requirements 3
4.3.2. Sampling Requirements 4
4.3.2.1 Consignment Line Samples 4
4.3.2.2 Grower Line Samples 4
4.3.3 AQIS Inspection Procedures 5
4.3.4 Rejection Procedures 6
4.3.5 Split Consignment Inspections 6
4.4 Untreated Produce Being Forwarded from Country Areas 7
4.5 AQIS Auditing Requirements 7
4.5.1 AQIS BQA/IHS Audit Requirements 7
4.5.1.1 Grower/Audit Frequency: 7
4.5.1.2 Grower Audits - Certification Assurance Systems 8
4.5.1.3 Audit Requirements/Growers - Suspension Criteria 8
4.5.1.4 Grower Audits - Non Compliance 9
4.6 Audit Requirements/Crop Monitors 9
4.6.1 Crop Monitor Audits/Non Compliance 11
4.7 Audit Requirements/Packinghouses 11
4.7.1 Packinghouse Audits/Non Compliance 12
4.8 Audit Requirements - Treatment Centres 13
4.8.1 Treatment Centre Audits/Non Compliance 13
4.9 Audit Requirements - Exporters 14
4.9.1 Exporter Delegate Audits 14
4.9.2 Exporter/Exporter Delegate - Non Compliance 14
4.9.3 Audits after Product Rejections by AQIS 15
Attachment 1 to Section 4 – AQIS Plant Contact List 16
SECTION 5. GROWER RESPONSIBILITIES 1
5.1 Registration 1
5.2 Responsibilities 1
5.3 Grower Audits 2
5.3.1 Grower Suspensions 2
5.3.2 Grower Audits - Non Compliance 3
5.3.3 Audit Requirements/Crop Monitors 3
5.3.4 Crop Monitor Audits/Non Compliance 4
SECTION 6. PACKINGHOUSE RESPONSIBILITIES 1
6.1 Grower Registration - Commodity Specific 1
6.2 Packinghouse Responsibilities - Commodity Specific 2
6.3 Inspection Requirements 2
6.3.1 Documentation 3
6.4 Security and Supervision Responsibilities 3
6.5 Packinghouse Audits 3
6.5.1 Application for Registration 4
6.5.2 Continued Registration 4
6.6 Suspension of Packinghouse Registration 4
SECTION 7. CERTIFICATION ASSURANCE ARRANGEMENTS - PACKINGHOUSE RESPONSIBILITIES 1
7.1 General Requirements 1
7.1.1 Auditing for New Zealand Requirements 2
7.1.2 CA - New Zealand Inspection Requirements 2
7.2 Documentation 4
7.3 Post treatment Security 4

SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES 1
8.1 Registration 1
8.2 Process Controls 1
8.3 BQA Treatments - AQIS Supervision 1
8.3.1 Fumigation Centres 1
8.3.2 Cold Storage Centres 1

8.3.3 Dimethoate Treatments 2
8.3.3.1 Waxed produce 2
8.3.3.2 AQIS requirements 2
8.4 AQIS Audits of Treatment Centres 3
SECTION 9. EXPORTER RESPONSIBILITIES 1
9.1 Registration Requirements 1
9.2 Exporter Responsibilities 1
9.3 Exporter Inspection 1
9.4 Split Consignment Inspections 2
9.5 Untreated Produce being forwarded from Country Areas 3
9.6 Delegation of Inspection 3
9.7 Documentation 3
9.8 Procedures for Exporter Rejected Produce 4
9.9 Post treatment Security 4
9.10 Security of Produce - Exporter/Freight Forwarder Premises 5
9.11 Audits - Exporters 5
9.12 Audits -Exporters Delegate 5
9.13 Exporter/Exporter Delegate - Non Compliance 5
SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES 1
10.1 Fruit Fly Area Freedom - Management Requirements 1
10.1.1 Area Freedom - Fruit Flies 1
10.1.2 Validation of Area Freedom 1
10.1.3 Outbreak 2
10.2 Trapping 2
SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS 1
11.1 Redback Spiders - Lactrodectus hasselti 1

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES 1

AVOCADO 1
BANANA 8
CITRUS 14
GRAPE 21
MANGO 25
PAPAYA 28
PINEAPPLE 31
POMEGRANATE 36
STRAWBERRY 39
TOMATO 44

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY 1

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT 1
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT 9
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA 17

APPENDIX 3 FORMS 1

3.1 APPLICATION FOR GROWER REGISTRATION 1
3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION 2
3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION 3
3.4 INSPECTION RECORD 5
3.5 FUMIGATION RECORD 6
3.6 COLD DISINFESTATION RECORD 8
3.7 WITHDRAWAL NOTICE 9
3.8 SUSPENSION NOTICE 10

3.9 DECLARATION OF DIMETHOATE TREATMENT 11
3.10 TOMATO VARIETY DECLARATION 12
3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 13
3.12 CONTAINER HYGIENE REPORT 15
3.13 STATUTORY DECLARATION 16
3.14 AVOCADO GROWER DECLARATION 17

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AMENDMENT RECORD

Amendments to this Manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
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GLOSSARY OF TERMS

AFFA	Agriculture, Fisheries and Forests of Australia
ANVAS	Avocado Nursery Voluntary Accreditation Scheme
APPB	Animal and Plant Programs Branch (AQIS Canberra)
AQIS	Australian Quarantine and Inspection Service
BQA	Bilateral Quarantine Arrangement
CA	Certification Assurance
EC (FF+V) O's	Export Control (Fresh Fruit and Vegetable) Orders
EDB	Ethylene Dibromide
IHS	Import Health Standards (New Zealand)
ISO	International Standards Organisation
MAF	Ministry of Agriculture and Forestry (New Zealand)
MAP	Maximum Allowable Prevalence
MB	Methyl Bromide
QC	Quality Control
SBV	Sun Blotch Viroid (Avocado)
SI(E)	Senior Inspector (Exports)

DEFINITIONS

AQIS Inspection Lots	An inspection lot is any number of packages from one packer/exporter of the same BQA commodity presented for inspection at one time. Lines are rejected/accepted for export based on this inspection. This includes lines presented for inspection that will be subsequently split into separate consignments for export to several destinations in New Zealand.
Commodity	All species/varieties of produce which come under the one genus of plants and are treated by the same disinfestation treatment, are to be considered as one commodity. (i.e. rockmelons and zucchini are one commodity under the cucurbit group of plants - mandarins and lemons are one commodity under citrus).
Defect	Any unit of produce that is infested with critical and/or quarantine pests.
End Point Inspection	Product inspection carried out on an individual grower line basis following disinfestation treatments being undertaken. Lines are rejected/accepted for AQIS inspection based on the results.
Grower Line Consignments	A consignment consisting of only one BQA crop and from one grower.
Homogeneous	An identifiable lot of produce which has been produced in accordance with the directions in this Manual resulting in uniformity of treatment.
In - Line Inspection	A process where a packinghouse under AQIS Approved Certification Assurance (CA) Arrangements, has defined a sampling and inspection method, that meets the appropriate sampling plan required in this Manual, over a period of time during the packing process.
Interim Approval	Approval for a disinfestation treatment system which has been accepted in principal by MAF but not ratified as an approved treatment system pending additional research being concluded and accepted by MAF. Any commodity which has an "interim approved" arrangement, will if live fruit fly is found during on-arrival inspection in New Zealand, be suspended from export to New Zealand immediately.
Line	A group of produce that is homogeneous.
Mixed Line Consignments	A consignment, covered by a single phytosanitary certificate for one commodity but from more than one grower.

Monitoring	The actions undertaken to detect the presence of fruit fly or other Risk Group 2 pest/contaminant in the orchard area and/or to meet New Zealand's fruit fly area freedom specifications.
Pathway	A documented series of activities that, when carried out according to approved procedures, form a discrete and traceable system, from the grower to export loading point.
Phytosanitary Certificate	The certificate signed by an AQIS Inspector in accordance with the International Plant Protection Convention verifying that produce has been produced in accordance with the Australia - New Zealand BQA and the directions of this Manual and appropriately endorsed.
Risk Group 3 Pest	Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic effects on their production and/or environment (some importing countries prohibit the entryof the host commodity). An offical surveillance system is required for such pests in New Zealand.
Risk Group 2 Pest	Risk Group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.
Risk Group 1 Pest	Risk Group 1 pests are those regulated pests which on introduction into New Zealand could cause unaceptable economic impacts on the production of a commodity/commodities and/or the environment.
Secure Package	Any approved method that will minimise the risk of cross contamination, re-infestation or substitution of produce destined for New Zealand after it has been inspected and/or treated, to ensure it meets the New Zealand entry requirements.
Trade Samples	Are fruits which are being forwarded for market appraisal, packaging methods or other types of research work being investigated on a commercial scale by importers/exporters involved directly in the Australia - New Zealand trade.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a cluster).

INTRODUCTION

SECTION 1. BACKGROUND

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements

The BQA is a formal agreement between the Australian Quarantine Inspection Service (AQIS) and the New Zealand Ministry of Agriculture and Forestries (MAF), to ensure New Zealands' pre-export requirements are documented. This is to ensure all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The previous BQA had 15 appendices which related to each commodity being exported. For example Appendix 2 related to pome fruits and included responsibilities that must be followed by AQIS before certifying apples or pears for export to New Zealand.

AQIS/MAF have amended the BQA to include a series of appendices that describe the requirements for a particular treatment for fruit fly host material. This new BQA structure incorporates recent developments in relation to the documentationof New Zealand import health standards (IHS) on a commodity by commodity basis.

The major change which occurs between the "old" and the "new" import systems is that under the "old" BQA, MAF imposed a tolerance of 5 live eggs/larvae of fruit flies in one million units of produce. To meet that fruit fly tolerance, operational systems had to include additional grower and packer responsibilities to ensure that a very low level of infested material would be presented to AQIS for export inspection. With the incorporation of the new IHS and BQA systems, New Zealand have reviewed the tolerance levels for fruit flies and now consider, disinfestation treatments that provide 32 insect survivors in one million treated insects (Probit 9 treatments), is now adequate security for their import Standards..

All approved fruit fly disinfestation treatments as listed in this Manual, meet the required New Zealand disinfestation standards. Any new disinfestation treatments that industry may require to be investigated (particularly heat treatments), will need to meet the efficacy requirements of the New Zealand IHS systems.

The resultant change in emphasis by MAF means that the previous stringent grower and packer requirements are no longer mandatory for all treatment pathways* where an approved disinfestation treatment is applied. However, packinghouses who have some responsibilities delegated to them through treatments and exporter inspection arrangements, will still have responsibilities to fulfil to ensure New Zealand quarantine requirements are met. There will be much more emphasis placed on treatment centres, treatment centre operators, post treatment security and exporter requirements than was previously required.

**NOTE Growers of some commodities will still be required to undertake specific responsibilities where there are pests which are categorised as Quarantine Risk Group 2 and need field control programs as a treatment management option for this category of pest. For further information see Grower Responsibilities Section 5 of this Manual.*

Specific Changes to the BQA

Under the new BQA/IHS framework, AQIS/MAF have changed the emphasis of the appendices from commodities to treatment pathways. This means that there are no longer mandatory requirements for many commodities, to document and undertake pre-treatment activities.

Procedures which may no longer be compulsory under the new BQA/IHS framework include;

. grower registration - (monitoring and spray diaries - unless specific controls are required for defined Quarantine Risk Group 2 pests).
. packer registration - (unless packer is packing defined Quarantine Risk Group 2 pest commodities, or is undertaking approved treatments of produce, or inspecting produce under exporter delegation).

NOTE Grower and/or packer registration may still be required where traceback to the "treatment" includes pest free production area or non-host status treatment with special requirements (e.g. designated non-host status by variety).

The new BQA/IHS and the requirements of this Manual concentrate on the documented responsibilities of treatment of produce through to the export of the commodities, including security of the system once treatment has been undertaken and inspection procedures which must be undertaken to ensure accurate phytosanitary certification and consignment homogeneity.

For most fruit fly host commodities it will only be necessary to have an auditable system from the treatment operator and/or treatment facility, including post-treatment security procedures until the product is loaded for export shipping, which will safeguard against possible product reinfestation or substitution.

However, for some commodities where Quarantine Risk Group 2 (RG2) pests are associated with the commodity being packed, an auditable system must be in place from grower through to export loading - as was the case under the "old" BQA systems.

1.2 Scope of the Manual

This Operational Manual is designed to ensure;

. only approved fruit fly host commodities are exported to New Zealand,
. homogeneity of fruit fly host produce consignments,
. approved treatments for fruit fly host produce are used,
. required levels and intensity of inspection of fruit fly host produce are maintained,
. security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce,
. records traceback to grower/packer/treatment centre - (as appropriate),
. accurate phytosanitary certification is made in accordance with New Zealand requirements.

The systems will be subject to random audits by the Canberra Office and all BQA/IHS systems may be audited by New Zealand MAF at frequent intervals. The purpose of such audits will be to establish that the terms and conditions of the BQA/IHS are being met via the procedures agreed to and documented in this Manual and will include measurement of pathway compliance from growers (where required) through to final export container loading and all associated documentation.

It is recommended that AQIS State Offices and State Departments of Agriculture (or equivalents), should also conduct management audits of the systems to ensure the State responsibilities are being adequately performed and recorded.

This Manual gives instructions for audit procedures and maintenance of records which will be the responsibilities of AQIS State Offices and where applicable State Departments of Agriculture or their equivalents (where these States still retain independent export inspection regimes), to implement and to take required corrective actions when non-conformities are identified.

The commodities and approved treatments that apply to fruit fly host produce are as follows;

	Commodity	**Treatments**	**Special Conditions**
.	Tomatoes	Dimethoate - Area Freedom	Grower Registration
.	Cucurbits	Dimethoate - Approved treatment	Nil
		Dimethoate - Unapproved "	Grower Registration
		Fumigation - Unapproved "	Grower Registration
		Area Freedom	Nil
.	Capsicum	Dimethoate - Area Freedom	Grower Registration
.	Grapes	Cold Storage - Area Freedom	Grower Registration
.	Pomegranate	Area Freedom	Nil
.	Pineapple	Non-Host	Nil
.	Strawberry	Fumigation - Area Freedom	Nil
.	Avocado	Cold Storage	Grower Registration
.	Citrus	Cold Storage - Area Freedom	Nil

NOTE All produce intended for export to New Zealand, whether grower registration is required or not, must be labelled with grower numbers and packinghouse numbers so that traceability can be undertaken back to growers properties.

SECTION 2. PEST CATEGORIES

MAF have made some alterations to the previous pest lists that have been used in conjunction with BQA products. Some of these changes include amendment to pest classifications or categories. Industry and AQIS inspection staff should compare the new pest lists for each commodity as listed at Appendix 1 of this Manual to become familiar with the new listings. Pest Lists are commodity specific and include reference to pests which are regarded as non-quarantine pests to enable additional direction to be given to inspection requirements.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Any pest detected which is not presently included in the Pest Lists **must** be reported to the Canberra Office immediately so that advice and categorisation can be made with MAF New Zealand. The consignment must held until a categorisation of the pest is made.

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS

Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic effects on their production and/or environment (some importing countries prohibit the entry of the host commodity). An offical surveillance system is required for such pests in New Zealand.

Risk Group 3 pests require approved disinfestation treatments to be undertaken in Australia and the establishment of operational systems which document the procedures which will be undertaken to ensure AQIS phytosanitary certification is meaningful and auditable by MAF.

The action taken by MAF should interception of Risk Group 3 pests be detected on arrival in New Zealand will be to reship or destroy the offending consignment and to immediately suspend the export treatment pathway. eg. if an offending consignment is associated with dimethoate treatment, all dimethoate treatments would be suspended (not just the offending commodity), until an AQIS audit/investigation was completed and results accepted by New Zealand.

The same rule applies to area freedom or non-host status treatment pathways.

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS

Risk Group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.

These pests/contaminants will require an Additional Declaration for Risk Group 2 pests on the phytosanitary certificate. The Additional Declaration will certify that some form of management

practice (ie. a pest control program in the field), has been carried out to ensure the consignment is free from the pest/contaminant of concern.

The action taken by MAF on interception of live Risk Group 2 pests will be to reship or destroy the offending consignment and immediately advise AQIS of the non conformance. There will be no suspension of trade invoked for Risk Group 2 pests although AQIS will usually conduct a follow up audit to determine the cause of the system failure and to implement corrective action where possible.

The commodities which require Additional Declarations for Risk Group 2 pests/diseases on the phytosanitary certificate are;

tablegrapes,	weedseeds* and redback spiders
capsicums,	weedseeds*
avocado.	Cercospora spot blotch (CSB) and Sun blotch viroid (SBV)

* Weedseeds are categorised by New Zealand as Regulated non plant pests/unwanted organisms however as there are no approved disinfestation treatments which can be undertaken in New Zealand for this category of pest, this Manual includes weedseeds as RG2 pests to simplify the document.

2.1.3 International Phytosanitary Certificate (PIC) Pests - Risk Group 1 - PESTS

Risk Group 1 pests are those regulated pests which on introduction into New Zealand could cause unaceptable economic impacts on the production of a commodity/commodities and/or the environment.

The action taken by MAF on interception of live Risk Group 1 pests will be to allow the consignment to be treated if an approved treatment is available or alternatively, the consignment will be reshipped or destroyed.

Should during exporter/exporter delegate inspections, Risk Group 1 pests be detected, the consignment must be rejected and subject to corrective action before being presented for AQIS inspection.

In accordance with International Plant Protection Convention (IPPC) rules for the issuance of phytosanitary certificates, should any live Risk Group 1 pest be detected during AQIS inspection, the consignment must be rejected and subject to corrective action (reprocessing, withdrawal of offending grower etc.), before being resubmitted for further inspection and certification.

2.2 Maximum Pest Levels

The inspection tolerance Table 1 as below ensures a 95% confidence that the given Maximum Allowable Pests (MAP) will not be exceeded for any category.

A 450 unit sample will only be permitted where the consignment contains less than 1000 units of fruit/vegetables.

A selected sample size must be nominated by the exporter or exporter delegate prior to any inspection being undertaken. Once a sample number has been selected it cannot be varied and must then be used for all inspections covering that line/consignment. ie. The AQIS and MAF on-arrival inspections will all be conducted at the nominated sample size rate.

TABLE 1
INSPECTION TOLERANCE TABLE
SAMPLE SIZES - PEST TOLERANCE LEVELS

Pest Category	450 Samples	600 Samples	950 Samples	1250 Samples
Risk Group 3	Nil	Nil	Nil	Nil
Risk Group 2	Nil	Nil	Nil	Nil
Risk Group 1	Nil	Nil	Less than 2 units	Less than 3 units

Pests listed as Non-regulated (non - quarantine) pests at Appendix 1 of this Manual, have an unlimited tolerance during inspection. These pests are regarded as non-quarantine pests between Australia and New Zealand.

NOTE

If a pest is found during inspection of produce for the BQA program that cannot be readily identified, it must be categorised as a Risk Group 2 pest until it is identified and the category becomes known. The offending consignment must be held until a categorisation is made.

SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS

3.1 Country Freedom From Fruit Flies

PEST FREE AREAS (BASED ON NASS STANDARD 158.03.07) ARE KNOWN AS APPENDIX 1 TO THE BQA/IHS

Appendix 1 to the BQA/IHS refers to fruit flies that are considered to be exotic to Australia and which are not established here. e.g. *Bactrocera cucurbitae* (melon fly).

Through the Australian surveillance and monitoring program, managed by the Plant Protection Office within AQIS, exotic fruit flies trapping and monitoring regimes which are conducted at all international ports (air and sea), Australia can claim and New Zealand will accept whole of Australia freedom from exotic fruit flies.

The air and sea ports that are included in the trapping and monitoring regimes are listed below;

Northern Territory

Darwin	Gove	Groote

Queensland

Brisbane	Bundaberg	Cairns
Gladstone	Karumba	Mackay
Mourilyan Harbour	Thursday Island	Townsville
Weipa		

New South Wales

Coffs Harbour	Newcastle	Sydney
Wollongong	Yamba	

Victoria

Geelong	Melbourne/Westerport	Protland

South Australia

Adelaide	Ceduna	Port Augusta
Port Lincoln	Port Pirie	Whyalla

Western Australia

Albany	Broome	Bunbury
Carnavon	Dampier	Derby
Esperance	Geraldton	Karratha
Perth/Freemantle	Port Hedland	Wyndha

Tasmania

Deveonport/Burnie	Hobart	Launceston

3.2 Area Freedom Districts within Australia

PEST FREE AREAS (BASED ON NASS STANDARD 158. 03. 06) ARE KNOWN AS APPENDIX 2 TO THE BQA/IHS

The fruit flies that are referred to at Appendix 2 to the BQA are those fruit flies which are endemic in Australia but for which various districts have, through trapping and monitoring programs, been able to establish area freedom from those flies. eg Bactrocera tryoni.

Area freedom from fruit flies is considered as an approved treatment for those areas where approved trapping regimes are in place in accordance with the minimum Standards as covered by the Australian Code of Practice for the Management and Control of Queensland Fruit Fly and where equivalent permanent trapping regimes are in place for Mediterranean fruit fly and Oriental species of fruit fly as stipulated in the New Zealand NASS Standard 158.03.06 and NASS Standard 158.03.07.

Should a fruit fly of any species (either alive or dead), be found during AQIS or Exporter inspections in Australia, AQIS will inform the State Department of Agriculture responsible for the Region supplying that fruit, of the detection and will suspend area freedom certification (for New Zealand and all other markets), until the cause of the find can be determined.

Should a fruit fly of any species (either alive or dead), be found during New Zealand MAF on-arrival inspections, it will mean the suspension of all area freedom certification from all districts of Australia until an AQIS audit can be undertaken to determine the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on the results of the AQIS audit.

The districts of Riverland (including the Riverland extension area and Mypolonga), and Riverina have been approved by MAF under specific management criteria (New Zealand NASS Standard 158.03.06), whereby, in the event of a fruit fly outbreak (2 flies detected with 400 metres within 14 days), the affected suspension zone area is a 15kms radius from the outbreak site, which applies for a period of one generation plus 28 days following the last fly caught.

NOTE: Should as a result of detection surveys, there be a situation where 2 outbreak sites are found between 1 - 3 kms apart, a 30 kms outbreak zone will be applied from a mid-distance between the outbreak sites. Where detections reveal two outbreak sites in excess of 3 kms apart, two 15 kms radii circles will be applied to each outbrek site.

The district of Sunraysia covering parts of New South Wales and Victoria, is subject to a 80km suspension zone and three generation time period however, a management plan application has been made to MAF seeking alignment with the Riverland and Riverina districts but has yet to be approved.

Should any another fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

State Departments of Agriculture (or their equivalents), must report all fruit fly finds (including single fly detections), from the fruit fly area freedom zones to AQIS Canberra Office within 2 days of detection and identification. This information shall be passed onto MAF New Zealand at the earliest opportunity thereafter.

The following districts are recognised as being considered free of all species of fruit fly as determined by trapping surveys and monitoring data forwarded by AQIS to MAF and accepted by MAF as meeting their requirements under NASS Standards 158.03.06.

3.2.1 Riverina - MIA

The area covers the horticulture growing districts along the Murrumbidgee River (and includes the township of Hillston on the Lachlan River), and includes (but not exclusive) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrrandera and Darlington Point and the towns which are located between the above nominated towns.

Area (b) is the Hillston District.

Area (c) is the Menindee District.

3.2.2 Sunraysia - Victoria and New South Wales

The area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems and includes (but not exclusive) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and other areas around and between these towns.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and other areas within these towns.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and other areas within these towns.

3.2.3 Riverland - South Australia

The area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships (including but not exclusive of), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri, Barmera, Waikerie and other areas within these towns.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat, Swan Reach including the towns in between and includes the Shire of Mildura.

Area (i) the Mypolonga township surrounds.

NOTE

In the event that "Area Freedom" is suspended within any of the above defined regions at any time, packinghouses who intend to pack both "area free fruits" and "suspension zone fruits" must develop written procedures to show how fruits from each area will be identified, segregated, processed, stored and documented. Fruits from "area free" and those needing physical or chemical

treatments must be shipped as separate consignments and cannot be co-joined.

3.2.4 Commodity Registration Requirements

Where a treatment is based on sourcing host material from a pest free area, the consignment must be directly traceable to that area. AQIS requires that grower numbers must form part of the trade description requirements and will form an additional traceback mechanism should such be required.

Where a treatment is a post harvest disinfestation treatment, the consignment must be traceable to the approved treatment facility and the unique treatment batch. AQIS however requires that grower numbers are part of the trade description requirements and will form additional traceback mechanisms should such be required.

Whilst grower registration may not be mandatory, all packinghouses must provide a list of growers names, addresses and allocated grower numbers for all produce that is being packed for the New Zealand market.

In the event that presently accepted fruit fly area freedom districts, fruit fly suspension zones are required, packinghouses must provide lists of growers who are in the deaclared quarantine suspension zones and a list of growers who remain in the area freedom districts surrounding an outbreak site.

TABLE 2
APPENDIX 1 TO THE BQA/IHS
AREA FREEDOM FROM FRUIT FLIES
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Capsicum	Yes	Yes	Yes	Approved State Dept Surveys	Yes
Citrus	No	Yes - Queensland	Yes	"	Yes
Tablegrapes	Yes	Yes	Yes	"	Yes
Avocado	Yes	Yes	Yes	"	Yes
All other commodities	Not required	Not required	Not required	"	Yes

Regardless of grower/packinghouse registration requirements, each package of produce destined for New Zealand will contain the grower number or equivalent recognised code, packinghouse number and exporters name and address.

Capsicum and tablegrape growers must register under the New Zealand program because of weedseed problems which are associated with the two commodities.

Tablegrapes are also subject to mandatory treatment for redback spiders. For fumigation specifications, see Section 11 of this Manual and for information regarding fumigators responsibilities see Section 3 of this Manual.

Avocado growers must register due to Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV) and citrus growers for citrus leaf miner which is categorised as a Quarantine Risk Group 2 pests for New Zealand.

Citrus growers in Queensland must be registered for field treatment requirements for the control of *Guignardia citricarpa* - Citrus black spot. Field treatments as recommended for the Australian - Japanese citrus program are acceptable and grower records must be kept for all controls that are being implemented. As citrus black spot is being surveyed for in other States, no grower monitoring or control programs need to be undertaken. **An additional declaration for this pest/disease must be made for all citrus consignments.**

Growers of other commodities under area freedom certification will not need to be formally registered for the New Zealand BQA.

3.2.5 Commodity Security - Area Freedom

All product being moved from a an area freedom from fruit flies district, which is to be loaded for export outside that district, must be fully secured at all times.

Approved security measures for transporting of produce will include either;

. fully shrinkwrapping of each pallet of produce,

. fully enclosing each pallet with shademesh cloth with a maximum aperture of 1.6mm. including the surface area between the bottom row of cartons and the actual pallet.,
. loading direct into panotech vans with units sealed by AQIS officers.

All consignments shipped out of Area Freedom Districts will be covered by either an AQIS EX 186 Transfer Certificate or EX28 Notice of Intention to Export Certificate issued by the despatching AQIS office. Each consignment must be inspected on arrival in the receiving district by AQIS officers in that region to verify security of the consignment/s are intact.

Should inspecting officers find that the security of the consignment/s have been breached during transporting, the consignments must be rejected for area freedom certification however, the rejected produce may be allowed disinfestation treatments as directed in this Manual as corrective action should the exporter chose this option.

3.2.6 Phytosanitary Certification Endorsements - Area Freedom Treatments

General Endorsement - 1

"The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia".

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

Specific Endorsements - Avocado

"The fruit in this consignment has been sourced from growers and blocks registered with the ANVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)".

Specific Endorsement - Tablegrapes

"The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti (*Australian redback spider*)".*

"The grapes in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand".

Specific Endorsement - Citrus Fruits

"The citrus in this consignment has undergone a disease control program that ensures freedom from *Guignardia citricarpa* - Citrus black spot".

Specific Endorsement – Capsicum

"The capsicums in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand".

3.3 Methyl Bromide Fumigation

METHYL BROMIDE FUMIGATION IS KNOWN AS APPENDIX 3 TO THE BQA/IHS AND APPLIES ONLY TO STRAWBERRIES.

Methyl bromide fumigation is an **approved treatment for strawberry fruits**. All fumigation must be performed by licensed fumigators and within AQIS/State Departments approved treatment centres.
All fumigations must be undertaken in accordance with AQIS Fumigation Standard.

For the purposes of this Manual, **watermelon** fumigation requirements are listed in this Section of the Manual although watermelon fumigation with methyl bromide is only an "interim approved" treatment at this time.

All exports of **watermelon** must be referred to in export documentation as **Appendix 9 to the BQA.** and additional responsibilities and requirements are located at Section 3.9 of this Manual.

Fumigation treatment requirements are as detailed in Table 4 below;

TABLE 4
METHYL BROMIDE FUMIGATION
TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21.0 - 26°C and above	32g/m3	Watermelon - 4 hours
15°C and above	48g/m3	Strawberry - 3 hours

All fumigations must be performed with the amount of product space equal to less than 50% of total air space within the chamber or tents.

Should live fruit fly be found during AQIS or Exporter inspections following treatment, the fumigation centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the methyl bromide treatment pathway will be suspended immediately for all Australian products, until an AQIS audit can be undertaken to determine the reasons for such failure.

3.3.1 Fumigation Responsibilities

All fumigation treatment centres requiring to be involved in the New Zealand BQA/IHS trade must be registered with AQIS for this purpose.

In addition to normal AQIS registration requirements that pertain to fumigation centres, the following additional requirements must be in place before registration for New Zealand BQA/IHS will be permitted.

All BQA/IHS produce which is required to be fumigated must be undertaken in accordance with the following process controls. Fumigation treatment centres must be able to demonstrate at all times that the following requirements are being met;

1. Incoming product identification.
2. Segregation from other produce and clearly marked "New Zealand"
3. The treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment. ie Treatment batch numbers relating to incoming consignments or equivalent recording system will be required.
4. Documented treatment records
5. How measuring equipment is calibrated and how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated products.
8. Supervision and security arrangements at loading.
9. If required, maintenance of inspection facilities on the premises.

In accordance with the above requirements, fumigation treatment facilities must develop a set of procedures which clearly define the responsibilities and work duties of all staff involved in the fumigation of watermelons or strawberries.

It is recommended that fumigation establishments write procedures for each of the above requirements detailing whom is responsible for the activity (it can be more than one person as long as all persons know their duties in each category), when the activity is done, what records are made and where these records will be filed.

With regard to Item 3 above, it is recommended that individual procedures accompanied by work instructions be written to define the processes and controls on the processes. The following criteria should be considered;

- within process control, mention must be made as to how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent, and

  .. define how the product will be equally spread through out the chamber/tent to enable free fumigant flow throughout the stack.

- how many fruits will be sampled to measure lowest flesh temperature of product,

- if tent fumigation is being performed, by whom and when, is the tent checked for holes/tears?

- who, how and when, is temperature measuring equipment calibrated. How is this recorded?

- where are in-process gas monitoring lines located within the stack for verification of fumigant dose rates, who is responsible for reading and recording this information,

- who calculates and who checks required fumigation dosage rate once temperature and volume are calculated?

- How is it established that circulation fans within the unit are working prior to fumigant being entered into the chamber/tent,

- Who is responsible, who checks that the correct amount of fumigant is entered into the chamber/tent?

- What procedures are applied to ensure no leaks of chamber or tent are evident,

- what period of time after initial fumigant is released into the chamber/tent will verification readings be made, using what type of equipment,

- calibration of gas measuring equipment is undertaken how frequently and who does this. Calibration details are recorded where?

- at completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file,

- who has the authority to sign off the treatment certificates to enable release of produce.

- how is treated product identified as being treated?

All processes undertaken by fumigation treatment centres for the New Zealand trade should have written procedures and the system should be such, that it can always be subject to audits.

All fumigations which are undertaken using flexible tent capacities will be subject to AQIS supervision and monitoring procedures to ensure that the requirements as directed above are being undertaken effectively. Fumigations performed in fixed capacity chambers or tents will be monitored by AQIS at frequent intervals during the fumigation season.

It is recommended that treatment centres when making application for registration for the New Zealand trade, submit a process control procedures manual for AQIS assessment so that registration and process controls can be assessed and approved simultaneously.

Growers and packinghouses associated with strawberry production and packaging do not need to be formally registered for the New Zealand export program as there are no Quarantine Risk Group 2 pests which need field control programs.

Not withstanding the above paragraph each package of fumigation treated produce will be clearly marked with grower number, packinghouse number and exporters name and address.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on

Transfer Certificate (EX 186) or Notice of Intention to Export/Export Permit (EX 28) and signed off by an AQIS approved officer.

NOTE Senior Inspectors (Exports) may approve variations to the above documentation requirements to suit own State operating requirements and the use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is to be used, it is recommended that audits of such systems be undertaken frequently enough to enable confidence within the systems.

3.3.2 Phytosanitary Certificate Endorsements

General Endorsement - 1

"The strawberries have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia".

and

General Endorsement - 2

"The fresh strawberries covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

3.4. Dimethoate Dip/Spray

DIMETHOATE DIPPING OR SPRAYING IS KNOWN AS APPENDIX 4 TO THE BQA/IHS

The application of dimethoate dips/sprays is an **approved treatment for tomatoes, capsicums, rockmelon and zucchini fruits/vegetables.**

Note ***Honeydew melons, cucumber, scallopini do not have an approved dimethoate treatment and reference must be made to Section 3.8 of this Manual for specifications that relate to these products.***

Where growers are supplying commodities that do not have Quarantine Risk Group 2 pests listed, those growers do not need to be registered for the purpose of this Manual.

Growers of commodities where Quarantine Risk Group 2 pests are listed will need to be registered by AQIS and such growers must maintain spray and monitoring diaries that demonstrate appropriate field control measures for those pests listed at Risk Group 2.

TABLE 5

DIMETHOATE DIPPING/SPRAYING
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Capsicum	Yes	Yes	Yes	Yes	Yes
Tomato	Yes	Not required	Yes	Yes	Yes
Rockmelon	Not required	Not required	Not required	Yes	Yes
Zucchini	Not required	Not required	Not required	Yes	Yes

Should live fruit fly be found during AQIS or exporter inspections following treatment, the dipping treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the dimethoate treatment pathway will be suspended immediately for all Australian products, until an AQIS audit can be undertaken to determine the reasons for such failure.

Capsicum growers must be registered to undertake required field control programs for weedseeds which are categorised as Regulated non plant pests/unwanted organisms by New Zealand and determined by AQIS to be equivalent to Quarantine Risk Group 2 pests and which are a recognised entry pathway associated with this commodity.

Tomato growers must be registered for the BQA/IHS due to the specific varieties of tomatoes which are permitted to be treated with dimethoate. Growers must sign declarations for each consignment of tomatoes delivered to registered packinghouses nominating the variety of tomatoes contained in that consignment.

Tomato packinghouses are not permitted to pack/treat tomatoes for New Zealand unless they have grower declaration forms and that the tomatoes are one of the five approved varieties permitted dimethoate treatments.

The five permitted varieties of tomatoes are; Floradade, Sunny, Duke, Hayslip and Tristar.

Not withstanding that growers and packinghouses (rockmelon and zucchini), may not need to be specifically registered for the New Zealand program each package of produce treated under this Section of the Manual, will contain details of the grower number, packinghouse number and exporters name and address.

The required dimethoate treatments for tomatoes, capsicums, rockmelons and zucchinis are:

Capsicums:	400ppm dimethoate applied as a spray system only.
Tomatoes:	400ppm dimethoate applied as either a spray system or dipping regime.
Rockmelons & Zucchinis:	400ppm dimethoate applied as a dipping regime only.
NOTE:	***(1) A tolerance in measurement of ±6% (or ±24 ppm) is permitted.***
	(2) When using a dipping regime fruit must remain submersed for 1 minute.
	(3) When using a spray system fruit must remain wet for 1 minute.

Treatment centres using dimethoate sprays/dips for New Zealand produce must be registered with AQIS for this purpose. When applying for registration, treatment centres should present a procedures manual detailing how their process controls will be implemented. The details of process controls that must be in place are as follows;

- that purchase of bulk chemical be from fresh stocks and certainly made from stock which is not older than 18 months,

- how chemical is be stored at temperatures below 40°C, as it has been determined that at temperatures above 46°C (for even 1 day), the active ingredient will degrade and solution strength will be lessened.

- the use of oils or waxes during the preparation of product prior to the chemical dipping treatment is prohibited.

- all product being treated with chemical dip will be free of soil.

- the chemical dipping process must be the last preparation process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted, following dip treatment.

. the packinghouse/treatment centre will nominate a person/s to undertake the making up of dimethoate solutions and the recording of each consignment or batch lot that is treated and packed for New Zealand,

- the nominated person/s must satisfy an AQIS authorised officer/inspector they are able to correctly determine the make up of chemical solution strengths, before a packinghouse/treatment centre will be permitted by AQIS, to chemically dip/treat fruits destined for the New Zealand market.

. the packinghouse/treatment centre will make up chemical solutions immediately prior to use and will have systems in place for recording solution strengths. The packinghouse or treatment centre will also record details of the mixing of the solution and any topping up of the solution during processing which allows for chemical wash out. Details will include the times and indicate volumes of product treated at the time of topping up.

. each treatment operator will be required to document their method/s of dipping and will include:

- size of the dip tank,

- method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc),

- maximum volume of water required for any/each treatment,

- amount of chemical required to achieve the required ppm level active ingredient,

- minimum allowable solution level,

- maintenance of active ingredient level (i.e. "top up" levels).

. treatment operators will have an identification system in place which must identify treated products from untreated products and these must be placed on pallets/bins/crates etc in a clear reasonably permanent manner.

. after dipping as many packages/crates as possible, must be marked/identified as being "treated".

NOTE When the processing of any batch is completed, the solution will be completely disposed of. Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems which demonstratively prove that they are able to carry over solutions to a following day without losing effectiveness of the chemical solution.

3.4.1 Post Treatment Security - Chemical Dipping/Spraying

Immediately following labelling of packaging, produce must be either:

. shrink-wrapped and sealed as a palletised unit, or

. shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom, or

. Coolstored unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product, or

. Coolstored protected in secure packages.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the State of operation for assessment and approval.

3.4.2 Post Treatment - Transportation of Product to Export Loading Point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on treatment centre premises.

. supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.

. documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.

. the nominated person can be either the exporters delegate or the operator of the treatment establishment.

. the exporter or the exporters delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.

. the exporter or the exporters delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,

    . if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce of the untreated produce must be properly secured.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.4.3 Phytosanitary Certificate Endorsements

General Endorsement - 1

"This product has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine Inspection Service concerning the access of fruit fly host material into New Zealand from Australia".

and

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

Specific Endorsement - Tomato

"This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia".

Specific Endorsement – Capsicum

"The capsicums in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand".

3.5 Cold Storage

COLD STORAGE IS KNOWN AS APPENDIX 5 TO THE BQA/IHS

Cold storage disinfestation treatments are permitted for the following commodities;

Citrus fruits **Pears** **Table Grapes** **Avocado**

Growers of commodities that do not have Quarantine Risk Group 2 pests listed in the Pest Lists at Appendix 1 of this Manual do not need to be registered for the New Zealand trade.

Growers of commodities where Quarantine Risk Group 2 pests are listed, must be registered with AQIS and must maintain spray and monitoring records to demonstrate that those Quarantine Risk Group 2 pests as listed, are being appropriately controlled by field management regimes.

Whilst grower registration may not be mandatory, all packinghouses must provide a list of growers names, addresses and allocated grower numbers for all produce that is being packed for the New Zealand market.

In the event that presently accepted fruit fly area freedom districts, fruit fly suspension zones are required, packinghouses must provide lists of growers who are in the deaclared quarantine suspension zones and a list of growers who remain in the area freedom districts surrounding an outbreak site.

Not withstanding the above registration requirements, each package of produce destined for New Zealand, must contain grower numbers or equivalent recognised code, packinghouse number and exporter name and address.

Tablegrapes must undergo a mandatory fumigation for the health pest redback spider. For details of the treatment requirements see Section 11 of this Manual and Section 3 regarding fumigators responsibilities.

TABLE 6
COLD STORAGE DISINFESTATION
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Avocado	Yes	Yes	Yes	Yes	Yes
Citrus	No	No	Yes	Yes	Yes
Pears	Not Required	Not required	Yes	Yes	Yes
Tablegrapes	Yes	Yes	Yes	Yes	Yes

Should live fruit fly be found during AQIS or Exporter inspections following treatment, the cold storage treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the cold storage treatment pathway will be suspended immediately for all Australian products until, an AQIS audit can be undertaken to determine the reasons for such failure.

Avocado growers must be registered to undertake field controls in accordance with New Zealand requirements for the Quarantine Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.

Tablegrape growers must be registered to undertake field management controls in accordance with New Zealand requirements for weedseeds which are classified as Quarantine Risk Group 2 pests/contaminants and packinghouses/treatment centres for the fumigation treatment for redback spiders.

3.5.1 Approved Cold Storage Disinfestation Treatments

The following treatment is approved for Queensland fruit fly for the commodities Pears, Tablegrapes and Citrus fruits,

The core temperature of the fruit must be held continuously at

. 0°C or below for not less than 13 days or

. 1°C ± 0.6°C for 16 days.

The cold storage disinfestation for Avocado is,

the core temperature of the fruit must be held continuously at

1°C (±0.2°C) for 16 days.

3.5.2 Registration

Cold storage premises used for cold disinfestation treatments will be registered by AQIS as an approved premises for treating/storing such fruits/vegetables as required under the Export Control Act and Fresh Fruits and Vegetable Orders and specifically for the New Zealand BQA/IHS list of commodities.

3.5.3 Cold Disinfestation Procedures

The registered treatment centre must have documented procedures in place for receival, identification by grower and packinghouse, segregation of all New Zealand destined fruits and marking/labelling all New Zealand BQA/IHS produce.

The following specific requirements must be in place to enable cold storage treatment centres to become registered for the New Zealand programs;

. minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of fruit or less. For each additional 250 cu.m. of fruit, or part thereof, one additional pulp sensor will be used.

. thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to staff using this equipment for temperature checks.

. the warmest area of each coolstorage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One sensor will be placed in fruit pulp at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors.

3.5.4 Temperature Recording

The following temperature recording requirements must be available before treatment centres will be registered for the New Zealand trade in BQA/IHS commodities;

. Continuous - Strip charts or data log sheets will be held for each cold treatment

batch, (Note: temperature recorders must be capable of monitoring fruit pulp temperatures, Ryan or Cox or similar air temperature recorders are not acceptable.

. Intermittent - Sensor temperatures will be manually recorded twice daily (morning and afternoon) for each day of the cold treatment and verified once every 4 days by an AQIS authorised officer.

Temperature records will be retained for auditing purposes by AQIS/MAF

NOTE: Where the refrigeration unit is equipped with a print out recorder, the AQIS inspector will initiate the treatment when the treatment chamber has stabilised at the required temperature. When cold disinfestation treatment is completed, the AQIS inspector will sign that the treatment has been satisfactorily undertaken and the records covering the treatment will be copied with one copy being retained by the treatment facility and the second copy being retained by the AQIS inspector and filed.

3.5.5 Record Requirements

Details required to be recorded include;

. date and results of sensor/probe calibrations

. date chamber was loaded with produce

. type and variety of produce treated, the quantity by lots involved, all to be identified by packinghouse and exporter.

. date the maximum pulp temperatures initially recorded 1°C $\pm$ 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded or date the pulp temperature of the fruit within the chamber recorded 13 days at 0° or below or equivalent.

. either continuous print out records or records of a.m. and p.m. temperatures within the chamber on a daily basis throughout the treatment program.

. date produce was cleared from chamber with details of post treatment security and dispatch of produce.

. date and results of re-calibration of sensors following completion of treatment.

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

. the security of treated produce whilst on their premises.

. supervision of loading and unloading of all consignments into and out of their premises identifying and segregating those consignments intended to be treated for New Zealand.

. documenting all incoming and outgoing produce that is intended to be exported to New Zealand.

. the nominated person/s can be either the exporters delegate or the operator of the treatment establishment.

The exporter or the exporters delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or product substitution can occur for New Zealand destined produce.

The exporter or the exporters delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packages of untreated commodities) that could cause cross infestation of cleared produce.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.5.6 Auditing Requirements – Cold Storage Disinfestation Centres

The SEI will be responsible for arranging an audit schedule for cold disinfestation centres and will consider the number and size of treatments being undertaken in determining frequency of audits. It is recommended that each cold disinfestation treatment centre should be audited at least twice during the operating season.

Audits will cover the receival (packer – exporter lots), segregation, identification and treatment batches and the recording and despatch records, security arrangements when product is loaded, for all treated produce.

3.5.7 Phytosanitary Certificate Endorsements

General Endorsement - 1

"This produce has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia"

and

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

Specific Endorsement - Avocado

"The fruit in this consignment has been sourced from growers and blocks registered with the NVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)".

Specific Endorsement - Tablegrapes

"The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti (*Australian redback spider*)".*

"The grapes in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand".

Specific Endorsement - Citrus

"The citrus in this consignment has undergone a disease control program that ensures freedom from *Guignardia citricarpa* – Citrus black spot".

NOTE The States of South Australia, New South Wales and Victoria through their Departments of Agriculture conduct surveys for Guignardia citricarpa and these States are considered free of this disease at this time. The above additional declaration however must be inserted on all phytosanitary certificates for citrus fruits regardless of origin.

3.6 Non Host Status

NON-HOST STATUS IS KNOWN AS APPENDIX 6 TO THE BQA

A number of commodities are agreed by MAF and described as non-host status. **Pineapple of the smooth cayenne variety** are fruits which are regarded as a non-host of endemic Australian fruit flies and can be shipped under the BQA subject to normal AQIS inspection and phytosanitary certification.

Growers of pineapple consignments being shipped to New Zealand must have records which can verify the variety of pineapple to be of smooth cayenne parentage.

It is important to note that non-host status applies only to Australian endemic species of fruit flies and therefore, should Australia have an incursion of an "exotic" species of fruit fly for which pineapple may be a host, this Appendix to the BQA, may be suspended until the fly is eradicated.

Under this treatment, growers do not need to be registered for the New Zealand trade.

Not withstanding the above, all packages of non-host produce being exported under the BQA/IHS must have growers numbers, packinghouse number and exporter name and address.

Packinghouses who require AQIS inspection on the premises must be registered by AQIS for this purpose as required under the Export Control (Fresh Fruits and Vegetables) Orders.

Exporters of non-host produce will need to be registered as exporters under the BQA/IHS as even though the fruit is considered non-host status, this is an official treatment under the BQA/IHS and pathway systems must be in effect.

All smooth cayenne variety pineapples must be secured and protected against substitution or malpractice at all times during transit of fruits which are destined for New Zealand.

Exporters are required to ensure that adequate security from point of loading ex packinghouse through to final export loading has been delegated or undertaken directly by the exporter. Records must be kept throughout any transport movement of non-host products

3.6.1 Phytosanitary Certificate Endorsement

General Endorsement - 1

"This produce has been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia"

and

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

3.7 Heat Treatments

HEAT TREATMENTS - KNOWN AS APPENDIX 7 TO THE BQA

Heat treatments such as vapour heat treatment (VHT) and high temperature forced air (HTFA) are recognised treatments for some commodities however, at this time Australia has not submitted any efficacy data to MAF seeking approval of VHT or HTFA as approved treatments for all nominated fruit flies for any Australian commodities.

NOTE Australian disinfestation work for VHT has only been conducted with relation to Queensland and Mediterranean fruit flies.

Should any heat treatments be approved by MAF in the future, requirements and conditions will be included in this Manual at that time.

Australia is not permitted to use heat treatment disinfestation methods for fruit fly host materials to New Zealand at this time.

3.8 Dimethoate Dipping - Interim Approved Cucurbits

DIMETHOATE DIPPING - INTERIM APPROVED PRODUCTS - CUCURBITS - KNOWN AS APPENDIX 8 TO THE BQA

The cucurbits, cucumber, honeydew melon and scallopini are approved for export to New Zealand under the "interim approved treatment of dimethoate dipping". Dimethoate spray treatments are not permitted for interim approved products.

The conditions and requirements for dimethoate dipping as listed at Section 3.4 of this Manual must be fully complied with. The conditions for identification, segregation, security and documentation requirements must be fully complied with.

Growers and packers of cucumber, scallopini, honeydew melon which are not listed at Section 3.4 must be registered for the New Zealand trade as the interim treatment is based on additional field controls for fruit fly, as well as the dimethoate dipping disinfestation treatment

Growers will maintain monitoring and spray diaries and will make these records available to AQIS officers upon request. Growers can elect to use commercial crop monitors for the purpose of monitoring however, all corrective actions must be recorded in spray diaries.

If crop monitors are to be used by growers, the crop monitor must be registered with AQIS for this purpose and all crop monitor records must be made available to AQIS authorised officers for audit purposes.

Growers not adequately maintaining field control monitoring and spray diaries may be suspended from the New Zealand BQA/IHS programs.

Packinghouses packing "interim approved dimethoate treated products" must maintain identification, segregation and security of all New Zealand destined produce and have such fruits clearly marked. This includes identification, segregation and security from cucurbit species nominated at Section 3.4 of the Manual. ie zucchini and honeydew melons must be received, processed, packed and stored completely separated from each other.

All packaging of cucurbits must contain grower numbers, packinghouse numbers and the exporters name and address.

3.8.1 Dimethoate Treatment Centre Requirements

All responsibilities as detailed at Section 3.4 of this Manual for treatment centres involved in dimethoate disinfestation procedures, must also be undertaken for "interim approved products".

3.8.2 Phytosanitary Certificate Endorsements

General Endorsement - 1

"The fruits/vegetables have been treated in accordance with Appendix 8 of the Arrangement between New Zealand Ministry of Agriculture and Forests and the Australian Quarantine Inspection Service concerning the access of fruit fly host material into New Zealand from Australia".

and

General Endorsement - 2

"The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

3.9 Methyl Bromide Fumigation - Interim Approved Product

METHYL BROMIDE FUMIGATION - INTERIM APPROVED PRODUCTS - WATERMELON - KNOWN AS APPENDIX 9 TO THE BQA.

Watermelon is the only product that has an interim methyl bromide fumigation treatment.

All the requirements listed at 3.3 of this Manual, (Fumigation Treatments), must be applied including treatment times, temperatures and dose rates.

The responsibilities of packinghouses, treatment centres and exporters as detailed at Section 3.3. of this Manual must be fully complied with at all times. All recording must be retained on file and made available at any time to AQIS authorised officers.

In addition to the responsibilities listed at Section 3.3 of this Manual, growers of watermelon must be registered with AQIS for the purpose of maintaining field controls to minimise the risk of fruit fly infestation whilst fruit is being produced. Growers must maintain property pest monitoring diaries and spray diaries for each field of watermelons being produced.

Packinghouses are required to be registered because of their responsibility to maintain security of watermelon whilst on the packing premises.

All packages of watermelon will have grower numbers, packinghouse numbers and exporter name and address on them.

Exporters are responsible to ensure that the security of the watermelons during all phases of transportation cannot be breached and that the produce cannot be reinfested or substituted following treatment.

3.9.1 Phytosanitary Certificate Endorsement

General Endorsement - 1

"The watermelons in this consignment have been treated in accordance with Appendix 9 of the Arrangement between New Zealand Ministry of Agriculture and Forests and the Australian Quarantine Inspection Service concerning the access of fruit fly host material into New Zealand from Australia".

and

General Endorsement - 2

"The watermelons covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF".

Attachment 1 to Section 3 – Summary of requirements for access of fruit fly host commodities into New Zealand from Australia

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Avocado	Area freedom	□	□	□	□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - "The fruit in this consignment has been sourced from growers and blocks registered with the ANVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)"
Avocado	Cold storage 1°C (±0.2°C) for 16 days	□	□	□	□	□	- "This produce has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - "The fruit in this consignment has been sourced from growers and blocks registered with the ANVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)"
Banana	Export prohibited						
Capsicum	Area freedom	□	□	□	□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - "The capsicums in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand"

✞ the commodity/treatment is interim approved only
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Capsicum	Dimethoate (spray only) 400ppm and fruit must remain wet for a minimum of one minute	□	□	□	□	□	- "This product has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - "The capsicums in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand"
Citrus	Area freedom		QLD	□	□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - "The citrus in this consignment has undergone a disease control program that ensures freedom from *Guignardia citricarpa* – citrus black spot
Citrus	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days		QLD	□	□	□	- "This produce has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - "The citrus in this consignment has undergone a disease control program that ensures freedom from *Guignardia citricarpa* – Citrus black spot"
Cucumber	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment is interim approved only
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Cucumber✞	Dimethoate (dip only) 400ppm and fruit must remain wet for a minimum of one minute	□	□	□	□	□	- "The fruits/vegetables have been treated in accordance with Appendix 8 of the Arrangement between New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Grape	Area freedom	□	□	□	□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - "The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti* (Australian redback spider)" - "The grapes in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand"
Grape	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	□	□	□	□	□	- "This produce has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - "The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti* (Australian redback spider)" - "The grapes in this consignment have been subject to field management regimes for control of quarantine weedseeds of concern to New Zealand"
Honeydew	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment is interim approved only
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Honeydew✞	Dimethoate (dip only) 400ppm and fruit must remain wet for a minimum of one minute	□	□	□	□	□	- "The fruits/vegetables have been treated in accordance with Appendix 8 of the Arrangement between New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Mango	Export prohibited						
Papaya	Export prohibited						
Pears	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Pears	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days			□	□	□	- "This produce has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Pineapple	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment is interim approved only
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Pineapple (smooth cayenne only)	Non-host status			□		□	- "This produce has been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Pomegranate	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Rockmelon	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Rockmelon	Dimethoate (dip only) 400ppm and fruit must remain wet for a minimum of one minute			□	□	□	- "This product has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Scallopini	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment is interim approved only
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Scallopini✞	Dimethoate (dip only) 400ppm and fruit must remain wet for a minimum of one minute	□	□	□	□	□	- "The fruits/vegetables have been treated in accordance with Appendix 8 of the Arrangement between New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Strawberry	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Strawberry	Methyl bromide 48g/m^3 for 3 hours at a temperature of at least 15°C				□	□	- "The strawberries have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - The fresh strawberries covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Tomato	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Tomato	Dimethoate (spray or dip) 400ppm and fruit must remain wet for a minimum of one minute	□		□	□	□	- "This product has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment is interim approved only
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Watermelon	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Watermelon✞	Methyl bromide 32g/m^3 for 4 hours at a temperature of 21°C to 26°C	□	□	□	□	□	- The watermelons in this consignment have been treated in accordance with Appendix 9 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - The watermelons covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Zucchini	Area freedom				□	□	- "The produce in this consignment has been treated in accordance with Appendix 2 for the fruit fly area freedom of the Arrangement between the New Zealand MAF and AQIS concerning the access of fruit fly host material into New Zealand from Australia" - "The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"
Zucchini	Dimethoate (dip only) 400ppm and fruit must remain wet for a minimum of one minute			□	□	□	- "This product has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand from Australia" - The fresh fruits/vegetables covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF"

✞ the commodity/treatment is interim approved only
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

SECTION 4. MANAGEMENT RESPONSIBILITIES

This section lists and describes the responsibilities associated with any BQA/IHS export pathway to be performed by all those organisations, groups and individuals to ensure that the BQA/IHS is developed, maintained and audited to standards that ensure confidence in the systems being implemented and accuracy in the phytosanitary certification which must be provided for export of fruit fly host products to New Zealand.

4.1 AQIS Canberra Office

The AQIS organisation structure and management flow chart is at Attachment 1 at the end of this Section. It is recommended that each AQIS Regional Office and/or State Department develop its own organisation structure and management flow chart as it will apply to the management and auditing of the Australian - New Zealand BQA/IHS and include this information for distribution within that State.

Manager - Plant Programs Section - Animal and Plant Programs Branch

. will be responsible for ensuring;

- all components of the BQA/IHS Systems Operations Manual are being complied with consistently, over all commodities and treatments through all States.

- by delegation within Plant Programs Section, for all establishments/premises that are required to be registered, that regular audits of State Departments (where applicable) and AQIS Region/State Office systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the BQA/IHS and that a proper record management system is available and easily accessible.

- for Certification Assurance (CA) establishments, that AQIS Region/State Offices are conducting audits of these establishments in accordance with the requirements of QMP - SM - 01 and the requirements of the BQA/IHS and this Manual.

- that wherever deficiencies are found in the systems, either at or within the States' responsibilities, that any adverse findings are recorded and corrected at the earliest opportunity and are subsequently re-audited to verify that corrective action requests have been satisfactorily implemented.

- collate and circulate up to date National lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.

- that all amendments to this Manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.

- ensuring that audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents), fruit fly area freedom trapping and

monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

4.2 State Departments of Agriculture (or equivalents)

Where AQIS is not directly represented at State level (Tasmania, Western Australia and Northern Territory), State Departments of Agriculture or their equivalents are responsible for the following;

. the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,

. ensure all exporters, treatment centres, packinghouses and growers (where applicable) are meeting the requirements of the BQA/IHS and the directions contained in this Manual,

. ensure inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities from that State, that are being exported to New Zealand,

. ensuring they have registered all required components of the export pathways for commodities being exported through that State and have a Register of registered growers, packers, treatment centres and exporters for the BQA/IHS commodities which have been forwarded to AQIS Canberra Office and that there are systems in place to forward amendments to the Register on a frequent basis (monthly),

. ensure that audits (including internal audits), are being conducted at the correct frequency so that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,

. ensure that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed.

. where required, ensure that the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual State management plans (as submitted to MAF New Zealand), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of New Zealand NASS Standards 158.03.06 and 158.03.07 and

- will report to AQIS Canberra Office any detections of economically significant fruit fly species found within trapping grids within 24 hours of identification.

4.3 AQIS State Offices

AQIS State Offices through the Regional Managers and Program Managers (Exports) located in Queensland, New South Wales, Victoria and South Australia are responsible for the following;

. the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,

. ensure all exporters, treatment centres, packinghouses and growers (where applicable), are meeting the requirements of the BQA/IHS and the directions contained in this Manual,

. ensure inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities from that State, that are being exported to New Zealand,

. ensuring they have registered all required components of the export pathways for commodities being exported through that State,

. ensure that audits (including internal audits), are being conducted at the correct frequency and that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,

. ensure that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed,

. ensure all inspectors in their State, involved in the New Zealand BQA/IHS export pathways, are immediately informed of any conditions and/or restrictions, when fruit fly outbreaks are reported to them by Canberra Office, in any district of Australia,

. ensure Canberra Office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

4.3.1 Registration Requirements

AQIS Offices and State Department agencies will implement a registration system for all growers (where applicable), packinghouses (where applicable), treatment centres and exporters who intend to produce, pack, treat and export fruits and vegetables as listed in this Manual for export to New Zealand.

AQIS prefers that growers should register for the New Zealand programs with their packinghouse or exporter however AQIS will accept grower applications for registration at local offices, State Departments of Agriculture or their equivalent. Whichever authority accepts the registration of growers/properties, they will be responsible to ensure that registration details are forwarded to both the AQIS State Office and the AQIS Canberra Office. The accepting authority will also be responsible for ensuring grower spray and monitoring diaries are current and relevant.

Growers of commodities who require registration, will not be permitted to participate in the New Zealand trade for that commodity, unless AQIS has details of the properties or blocks for registration, of that grower.

All organisations that are undertaking approved disinfestation treatments must be registered, packinghouses where required for specific commodities must be registered and all exporters of fruit fly host commodities (including non-host commodities) must be registered for each commodity.

It is the responsibility of each individual State/region to develop a system of recording registrations and that such records are maintained so they are auditable.

Registration details will include name, address, unique number identifier, purpose of registration (grower, packer treatment centre etc.), and current status e.g. active/non active.

AQIS State Offices and State Department Agencies, must forward a list of registrations made in that State to Canberra Office for an Australian consolidated list. A list of current registrations should be forwarded prior to the commencement of each commodity season and must be updated/amended as new applications are processed during a season. Canberra Office will make this list available to all State Offices/Agencies through the LAN computer network or hard copy documents.

NOTE This information is extremely important particularly when exporters are sourcing fruits from interstate but assembling export consignments in their home State prior to export to New Zealand.

4.3.2. Sampling Requirements

4.3.2.1 Consignment Line Samples

Following individual grower line inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines can only consist of the one genus of fruits/vegetables. i.e. lemons, oranges and mandarins that have had a common treatment (area freedom) or one treatment centre (cold storage disinfestation) applied.

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. There can be no rules that must be applied however the following guidelines may assist in determining selection of sample cartons;

- select one or more samples from the grower submitting the largest lot within the consignment,

- select one or more samples from the commodity comprising the greatest quantity in the consignment line,

- select at least one carton from the commodity seen to present the greatest quarantine risk,

- select at least one carton from any known “poorer” performing growers/packers or from a newly registered grower or packer.

Consignment lines that are passed after AQIS inspection, will be identified as “passed for New Zealand” and immediately separated from any other produce which has not been passed or destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.2.2 Grower Line Samples

A grower line is a number of packages of one commodity from one grower with one common treatment, presented for inspection at one time. This includes a grower line that is presented for inspection that will subsequently be split into separate consignments for export.

Grower lines that are passed after AQIS inspection, will be identified as "passed for New Zealand" and immediately separated and segregated from any other produce which has not been passed or destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.3 AQIS Inspection Procedures

AQIS will carry out inspections as required under the New Zealand BQA/IHS only where establishments provide an area which is suitable for the purpose and contains:

- a suitable bench or table on which to work,
- suitable fixed lighting of a minimum of 600 lux,
- a clean and relatively noise free area in which to perform inspection functions,
- all relevant BQA/IHS documentation covering the line to be inspected is available prior to inspection commencing.

Inspections performed by AQIS for the BQA/IHS programs will be recorded on "Inspection Record - New Zealand" Appendix 3.4 attached.

NOTE Alternative types of Inspection records can be developed and used as long as it contains at least the information supplied on the inspection record sheet as detailed in Appendix 3.4

AQIS inspection may be by grower line or by consignment line at the option of the exporter (but exporter must undertake grower line inspection and provide detailed records of such inspections), and will be in accordance with the sampling plan detailed in Table 1 and at the same sample regime as used by the exporter/exporter delegate.

For inspection on a consignment basis produce can be from multiple grower/packer combinations but will belong to only one commodity group.

NOTE: Not withstanding the requirements of this Manual, should AQIS consignment inspection result in a rejection for quarantine purposes, the whole consignment is rejected not just that particular grower line. If the exporter requires the balance of the consignment for export purposes, the exporter/exporter delegate must re-inspect the balance of the consignment (as it is a new lot), by grower line before AQIS will re-inspect.

Exporters will provide AQIS officers with inspection records of the consignment line/grower line inspection details before AQIS will commence their inspection. If all records are not provided or any records are incomplete, the consignment will not be inspected until these records are completed and sighted.

NOTE AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom of the RG 1 pest, mealybugs. Until industry can provide clear scientific evidence that the New Zealand quarantine RG 1 mealybugs - Ferrisia virgata, Maconellicoccus hirsutus, Nipaecoccus viridis and Planococcus pacificus are not associated with the export pathway.

4.3.4 Rejection Procedures

A rejection on inspection by AQIS of either consignment or grower lot, does not necessarily indicate that a packinghouse or grower has breached the conditions of the Arrangement. It should however indicate a possible problem within the packer/exporter system and therefore it will be recorded.

All rejections are to be recorded on Form Ex 161 (Inspection Advice Note) and must record grower, packer and exporter/delegate through which the commodity has passed.

Exporters/exporter delegates who fail two inspections in any one season must be audited immediately to ascertain if there are reasons that AQIS may consider necessary, for suspending the nominated inspector/quality controller from the New Zealand programme, or if corrective actions can be implemented quickly, the possible need for a follow up audit within 7 days.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for Quarantine Risk Group 3 Pests - Immediate suspension of treatment centre (and in the case of "Area Freedom from Fruit Flies", all area freedom districts in that State are suspended), and the possible suspension of other elements of the export pathway as may be determined by audit. Audit/s to be undertaken at earliest opportunity.

- Any rejection for Quarantine Risk Group 2 Pests - Senior Inspector/Supervisor to be informed immediately to consider if audit of grower, packer, exporter or exporter delegate is necessary. This may depend on type and quantity of infestation detected.

- Any rejection for Quarantine Risk Group 1 Pests - The consignment can be totally withdrawn from the New Zealand export market or corrective action must be undertaken either by treating the product (fumigation etc.) or the exporter can withdraw the offending part of the consignment, undertake reinspection before re-presenting the remaining part of the consignment for further AQIS inspection.

4.3.5 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed including any that may have not been forwarded to New Zealand. (i.e. sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: The "split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has approved that the necessary documentation and record keeping is satisfactory and auditable.

This procedure will allow one inspection at the fee for service rate and the first phytosanitary certificate free. All subsequent phytosanitary certificates both originals or certified copies, will be charged for at the rate determined in the Fees Orders.

Split consignments where exporters/importers want to reduce the MAF on arrival inspection, must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

- notification of consignment details to MAF as they occur,
- the New Zealand communication links (importer and MAF contacts),
- flow chart detailing how the phytosanitary certificate moves through the system.

Each such procedure must have AQIS and MAF approval before implementation.

4.4 Untreated Produce Being Forwarded from Country Areas

Growers who are involved with Risk Group 2 and 3 commodities and, who will be forwarding untreated produce from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate, signed by an authorised AQIS officer), or a signed copy of an EX 28 Notice of Intention to Export or, a grower declaration form, attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide either the transfer certificate, Notice of Intention to Export or grower declaration to AQIS, prior to any AQIS inspection being undertaken.

4.5 AQIS Auditing Requirements

4.5.1 AQIS BQA/IHS Audit Requirements

AQIS inspection staff are to conduct audits of growers (where applicable) to ensure compliance with registration requirements. Such audits are to include an assessment of growing practices, field hygiene, pest monitoring, spray diary entries and SBV status (avocado growers only). AQIS however, may not audit all individual growers who are supplying fruit to:

- * CA accredited packinghouses,
- Packinghouses who pack commodities which do not require grower registration,
- * Growers who are using the services of a registered crop monitor.

* However, some growers under these regimes must be audited as part of the audit of the packinghouse establishments as documented in Grower/Audit frequency, Section 4.8.1 of this Manual.

4.5.1.1 Grower/Audit Frequency:

AQIS audits of growers will be conducted where a commodity has Quarantine Risk Group 2 pests listed which require field management controls. To enable phytosanitary certification in accordance with New Zealand requirements, audits will be conducted to ensure compliance with the stated directions contained in this Manual.

Where Quarantine Risk Group 2 pests are listed within a commodity Pest List, growers must be registered and must undertake the required monitoring and field controls and have records of all management surveillance and corrective actions.

The accepting authority for grower registrations, will ensure audits are conducted and ensure property records are maintained in accordance with the directions in this Manual.

Upon application to be a registered grower, the accepting authority will conduct an "initial" audit of the growers property and the record keeping to satisfy themselves that the grower can meet the requirements of this Manual for that commodity. Following an initial audit, growers will have at least one other "additional audit" after the initial audit during the subsequent growing season.

For growers previously registered and having successfully participated in the New Zealand program the previous season/year, one audit will be formally conducted early in the new picking/packing season. (i.e. no initial audit is required in subsequent years/seasons providing registration and supply to New Zealand has been continuous).

Should deficiencies be found at anytime during the registration period, follow up audits will be required to ensure corrective actions have been completed which will allow registration to be continued. Should a grower not manage the registered property in accordance with the directions of this Manual and make no corrective action where deficiencies are detected, the property must be placed under suspension from the New Zealand program.

Where an Agency other than AQIS has placed a property under suspension from the New Zealand trade, that Agency must inform their AQIS State Office of the suspension at the earliest opportunity. The AQIS State office will advise inspection staff in the area of property suspension and advise AQIS Canberra Office as soon as possible after obtaining such a report.

All audits of growers (AQIS or State Department staff), will be "announced audits" giving the grower at least two days notice. All AQIS audits are chargeable with the times involved being debited to the exporter or packinghouse with whom the grower will be supplying product.

Unannounced monitoring audits can be conducted if in the opinion of the Senior Inspector (Exports) a need is demonstrated. Unannounced monitoring audits are not chargeable unless a major non-conformance is detected.

4.5.1.2 Grower Audits - Certification Assurance Systems

Where a packinghouse has an approved Certification Assurance Arrangement with AQIS, and is involved in a commodity which has Quarantine Risk Group 2 pests, the packinghouse must register and audit those growers to ensure that stipulated field management controls are effected.

During normal AQIS auditing of an establishments' CA Arrangement, a sample of registered growers will be audited as part of the overall quality system for compliance with the requirements of the BQA/IHS and the directions given in this Manual. If a major non-conformance is detected at such grower audits, the suspension of the packinghouse may be considered necessary as it is the packinghouse that is responsible for ensuring compliance with AQIS/New Zealand requirements.

4.5.1.3 Audit Requirements/Growers - Suspension Criteria

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

. no pest control or monitoring records,

. bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,

. bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.

. evidence of growers not committed to carrying out the requirements as set out in this Manual,

. no corrective action to control quarantine weeds/seeds or pests and diseases,

4.5.1.4 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow up audit, should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

. inadequate monitoring/spray records,

. insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),

. evidence of quarantine weeds within the property (but not yet seeding). This is of particular relevance to the crops, table grapes and capsicums which are subject to this type of infestation,

. adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days or a week or so, is dependant on the type of problem and the relationship to growing/harvesting of the current crop. SI Exports will have to determine whether follow up audits will be required or not.

4.6 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent) to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or their equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for, and, such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where, through AQIS packinghouse grower audits, it is found that at least three growers are covered by the same crop monitor, and grower audit reveals substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived, by the SI (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

4.6.1 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

. failure to maintain individual grower records,

. inadequate or incorrect records,

. failure to provide growers with a record of each visit including any recommended pest control measures,

. recommendations to growers to apply non-recommended or unregistered chemicals.

4.7 Audit Requirements/Packinghouses

All packinghouses packing BQA/HIS produce will be audited annually (minimum) for compliance with grower numbers/addresses registers, training of staff within the establishment, completion and storage of records and security responsibilities. Variance to audit requirements can be made at the discretion of the SEI.

Packinghouses involved in commodities with Risk Group 2 pests will be subject to AQIS audit on initial application/registration under the New Zealand requirements and then at least on one further occasion during the actual packing season.

Packinghouses which are involved in physical or chemical disinfestation treatments for the New Zealand BQA/IHS will be subject to auditing requirements against the directions contained in Section 3 - Approved Treatments, of this Manual.

A packinghouse that has been delegated and accepted exporter inspection duties as required by this Manual, will be audited to ensure that all such inspections have been conducted in accordance with the directions of this Manual and that proper records have been maintained and filed.

Where packinghouses are required to be registered under two or more of the above criteria, audits of each element requiring registration will be conducted in one audit.

If a packinghouse audit detects minor non-conformities against the requirements and directions of this Manual, the packinghouse will be required to address the concerns, and a follow up audit will be scheduled within 7 days.

If a packinghouse audit detects major non-conformance in any element, consideration will be made as to whether the packinghouse should be suspended until the required corrective action has been implemented and successfully re-audited. The Senior Inspector (Exports) will have the authority to assess and implement the necessary actions depending on the circumstances surrounding a non-conformance against the systems.

The basis of all packinghouse audits is to ensure it is performing its responsibilities for those commodities/treatments/inspections under the BQA/IHS arrangements and the directions of this Manual.

CA accredited packinghouses will be audited for compliance with the New Zealand BQA requirements under their existing audit programmes.

All audit time involved at the packinghouses is to be charged to the packinghouse involved.

4.7.1 Packinghouse Audits/Non Compliance

AQIS may deregister a packinghouse for the New Zealand BQA/IHS if:

- the packinghouse was sourcing fruit/vegetables from unregistered growers where it is a requirement of this Manual for them to be registered.

- the packinghouse did not have procedures in place for identifying commodity specific registered grower/s,

- the packinghouse did not mark packages with a registered grower and packinghouse number,

- the packinghouse did not have procedures in place to segregate commodity specific growing lines through the packing process, (including area freedom treatment commodities),

- the packinghouse did not have trained staff operating at the time of packing BQA/IHS produce, that could recognise pests, disease and weeds seeds, that are of concern to New Zealand,

- the packinghouse did not have procedures in place to deal with suspect fruit with a sting, rot or bruise,

- the packinghouse did not comply with "inspection procedures" as delegated and accepted by them through their exporter,

- the packinghouse did not comply with any other requirement set out in the BQA/IHS and the directions contained in this Manual.

4.8 Audit Requirements - Treatment Centres

Each treatment centre (either fumigation, chemical dip/spray treatment or cold), is responsible for clear, precise, documented and auditable procedures that detail how product relating to the BQA/IHS process is;

1. Identified.
2. Treated and marked as treated.
3. The treatment process and controls.
4. Documented treatment records
5. How measuring equipment is calibrated and how often and by whom.
6. Secured after treatment.
7. Segregated from untreated product.
8. Supervised at loading.

Each treatment centre establishment (excepting fumigation facilities which are subject to direct supervision of each treatment performed), will be audited by AQIS at least once a month unless a premise has a CA arrangement with AQIS. Audit reports will be kept on file for a period of not less than 2 years.

AQIS requires that all treatment centres (other than fumigation centres), be monitored on a monthly basis during their operating season and that audit reports are to be kept detailing when auditing/monitoring checks were performed. These audits/monitoring checks can be undertaken as part of inspection duties where inspections are performed at such centres but reports must be written and placed on file when they are actually undertaken.

Note Senior Inspector (Exports) has the authority to vary the above audit requirements on the basis of compliance with the operating instructions of this Manual. ie in the case of continued substantial compliance, audit intensity may be reduced, in the case of marginal compliance or repeated non-conformance, intensity may need to be increased.

Inspectors must ensure that treatment facilities are maintained in a condition that will provide efficacy in treatment programs, that all measurement gauges are regularly calibrated and records maintained to verify it. That movement of treated produce must be documented and recorded, particularly in relation to load out activity and that security of produce is maintained at all times that the product is on the premises.

4.8.1 Treatment Centre Audits/Non Compliance

Should monitoring/audit checks when carried out on a treatment centre premises reveal non conformances, an official audit must be scheduled as soon as possible so as to instigate corrective action.

Findings that may lead to suspension as a registered treatment centre or increased auditing scheduling under the BQA/IHS will include :

. insufficient/improper identification of treated and untreated product,

. incorrect treatments,

. improper documentation,

. no calibration or records of calibration regarding measuring equipment,

. no segregation of untreated product and treated BQA product,

. product not correctly marked as treated or secured after treatment.

All audit time is to be charged to the treatment centre involved.

4.9 Audit Requirements - Exporters

AQIS will perform an audit of all exporters registered for the New Zealand programme annually. All relevant documentation for all New Zealand BQA/IHS consignments must be made available to the AQIS authorised officer. Records may include, grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter/exporter delegate inspections, export documentation including EX 186 - Transfer of Product (or equivalent documents), EX28's - Notice of Intention to Export and Phytosanitary Certificates.

4.9.1 Exporter Delegate Audits

In addition to any scheduled packinghouse audit, where packinghouse personnel are also approved to act as an exporter delegate for the purpose of inspection, treatment and/or load out security, two audits per year will be conducted on the exporter delegates responsibilities and their records. Audits will include inspection documentation, knowledge of Risk Group 1, 2 and 3 pests, demonstration of inspection techniques, sample selection and knowledge of the inspection requirements of this Manual.

4.9.2 Exporter/Exporter Delegate - Non Compliance

An Exporter/Exporter Delegate may be suspended from the BQA/IHS if they are not meeting their obligations under the BQA/IHS. Major non-compliance may include:

. failing to provide up to date and correct documentation, including Inspection Records for New Zealand BQA/IHS product,

. failing to correctly sample and inspect product,

. failing to appropriately train (or be trained), Quality Control inspectors for the purposes of inspecting BQA/IHS product,

. failing to segregate BQA/IHS treated/passed product from non treated product,

. failing to fulfil any other requirement/responsibility as outlined in this Manual.

Additional audits (scheduled by the SI (Exports)), will be scheduled where an audit reveals minor non-conformities occurring within the exporter/exporter delegate responsibilities. The exporter/exporter delegate audit costs, will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made and agreed by AQIS.

4.9.3 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

. exporter/delegate inspection records,

. grower pest monitoring records and pest control diaries (commodity specific),

. packer training and associated pest identification,

. premises general hygiene,

. cleanliness of machinery and equipment,

. segregation and identification of produce/products,

. staff responsibilities,

. exporter or exporter delegate performing inspections are competent in carrying out their duties and know correct identification of pests/weed seeds.

Should auditing prove satisfactory and fails to identify any breach of the BQA/IHS arrangement or responsibility under the programme, all parties will be immediately re instated.

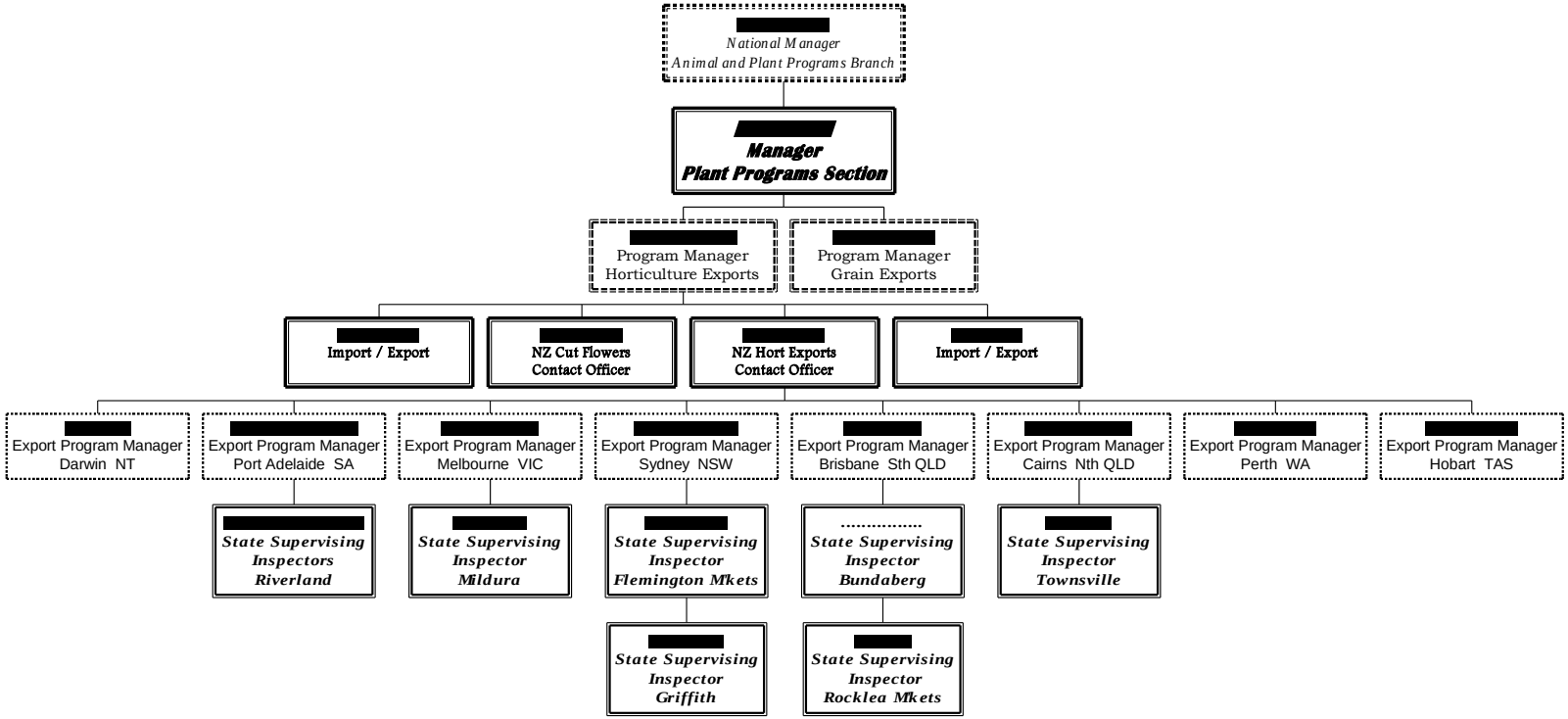
Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to State Senior Inspector Exports who will co-ordinate necessary action and advise all parties. Copies of any audit will be given to the relevant components of the pathway audited and kept on file in the State AQIS or Department office.

Inspectors undertaking these audits must be either AQIS AQA, AQIS CA or ISO/CA trained and accredited.

Attachment 1 to Section 4 – AQIS Plant Contact List

AQIS Plant Contact List



SECTION 5. GROWER RESPONSIBILITIES

5.1 Registration

Where growers are growing and exporting commodities where there is no listing for Quarantine Risk Group 2 pests in the Pest Lists Section of this Manual, growers of those commodities do not need to be registered for the purposes of exporting BQA/IHS commodities to New Zealand.

Growers of commodities (excepting southern state citrus growers), which have pest listings at Quarantine Risk Group 2, must be registered with AQIS for the purpose of exporting those commodities to New Zealand. The commodities which do have Quarantine Risk Group 2 pest listings are **Avocado, Citrus and Tablegrapes.**

Tomato growers who must treat their produce with dimethoate dips/sprays must also be registered under this BQA/IHS because of the requirement to only treat approved varieties of tomatoes. Cucurbit growers of commodities which do not have officially approved treatments (honeydew melons, cucumber and scallopini), must also register as the requirement for field controls is part of the "interim approved" treatment pathways.

Growers who must be registered for specific commodities, will do so either by making application direct to AQIS or through their packinghouse or exporter. Packinghouses and exporters must forward any grower applications through to AQIS/State Offices for inclusion on the Master List (compiled by AQIS Canberra Office) of growers, approved for the New Zealand trade in that/those commodities that require grower registration.

Packinghouses/exporters who accept application for registration from growers will be responsible for maintaining all information which those growers will need to have in place to ensure compliance with the direction contained in this Manual and for auditing those growers in accordance with the directions contained in this Manual.

5.2 Responsibilities

Growers of commodities with Quarantine Risk Group 2 pest listings (as covered in 5.1 above), must maintain spray, monitoring diaries and field hygiene requirements that demonstrate an appropriate level of management and recording for those pests/contaminants listed at Quarantine Risk Group 2 in the Pest Lists as contained at Appendix 2 of this Manual.

Growers of citrus fruits whilst having the Risk Group 2 pest *Guignardia citricarpa* - Citrus black spot, will only need to be registered in the State of Queensland where this disease if found and they must maintain spray and monitoring diaries for control of this pest. Growers in the Southern states of New South Wales, Victoria and South Australia are not required to be registered for this program and the requirements for monitoring and spray diaries is not required as State Departments regularly survey for this disease.

Growers must register each block or property/ies that they will be using to grow those commodities which have Quarantine Risk Group 2 pest listings.

Growers are permitted to use the services of AQIS approved crop monitors for the New Zealand BQA/IHS arrangements. Should growers use the services of an AQIS approved crop monitor, the grower must still maintain spray diaries showing implementation of any corrective actions undertaken on the New Zealand registered property/block/commodity.

Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered New Zealand grower that they are undertaking services for.

5.3 Grower Audits

The registering authority (State Department, AQIS, packinghouse or exporter), will undertake grower audits at the following frequency;

. in the initial year of registration,

- before the grower is approved as a New Zealand grower (before harvesting commences) and
- one further audit during the growing season.

. where grower registration is continuous, in subsequent years,

- once during the season.

AQIS audits of grower responsibilities will be conducted simultaneously with packinghouse/exporter audits. All audit time will be charged to either the packinghouse or the exporter.

NOTE; GROWERS WILL NOT BE CHARGED FOR AUDITS ASSOCIATED WITH THE NEW ZEALAND BQA. ALL AUDIT CHARGES ARE TO BE INVOICED TO THE PACKINGHOUSE OR EXPORTER WHO IS PACKING/ACCEPTING THE REGISTERED GROWERS' FRUITS/VEGETABLES UNLESS ANOTHER SATISFACTORY ARRANGEMENT IS MADE BETWEEN AQIS AND THE PARTIES INVOLVED.

5.3.1 Grower Suspensions

Growers will be suspended from the New Zealand trade if spray and monitoring diaries are not accurately maintained through-out the year or growing season.

With relation to growers of tablegrapes and capsicums, crops which have weedseed quarantine pest declarations, such growers may be suspended if at audit it is found that prohibited weeds are not being properly managed and/or controlled.

All growers of Quarantine Risk Group 2 pests must maintain monitoring and spray diaries of their registered blocks. All activities shall be recorded even where pests are noticed but are of small infestation levels which are deemed inappropriate to control with chemical sprays.

As contained at Section 4.6.2.3 the following considerations may be applied to growers during grower audits;

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

- no pest control or monitoring records,
- bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,
- bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.
- evidence of growers not committed to carrying out the requirements as set out in this Manual,
- no corrective action to control quarantine weeds/seeds or pests and diseases,

5.3.2 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow up audit should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

- inadequate monitoring/spray records,
- insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),
- evidence of quarantine weeds within the property (but not yet seeding). This is of particular relevance to the crops, table grapes and capsicums which are subject to this type of infestation,
- adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days or a week or so, is dependant on the type of problem and the relationship to growing/harvesting of the current crop. SI Exports will have to determine whether follow up audits will be required or not.

5.3.3 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent), to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or there equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for, and, such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where through AQIS packinghouse grower audits, it is found that at least three growers are covered by the same crop monitor, and grower audit reveals substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived, by the SI (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

5.3.4 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

. failure to maintain individual grower records,

. inadequate or incorrect records,

. failure to provide growers with a record of each visit including any recommended pest control measures,

. recommendations to growers to apply non-recommended or unregistered chemicals.

SECTION 6. PACKINGHOUSE RESPONSIBILITIES

Packinghouses which are packing fruits/vegetables for New Zealand do not need to be specifically registered for the New Zealand export trade unless they are packing commodities with Risk Group 2 pests or have been delegated and accepted duties/responsibilities by exporters.

Packinghouses that are effecting treatments as defined in the BQA or in this Manual must be registered for that purpose.

Therefore all packinghouses which are packing fruits/vegetables under the "Area Freedom" treatment (Appendix 2 to the BQA), must be registered for this purpose.

Packinghouses will however, maintain secure conditions for the packing of growers fruits and will have systems in place to ensure grower identification and segregation of New Zealand fruits is maintained so that cross contamination with other commodities or the same commodity for markets other than New Zealand is minimised.

All fruits/vegetables for the New Zealand export trade must include grower numbers and packinghouse numbers of each individual package. It is the exporters responsibility to ensure that the exporter name and address is on all packages.

Packinghouses must have records identifying produce from each grower that is received, packing details and despatch details for each batch/lot of fruit that is to be certified for New Zealand.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal packinghouse registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

6.1 Grower Registration - Commodity Specific

All packinghouses must provide a list of growers names and addresses and designated numbers/codes for all suppliers of New Zealand BQA/IHS produce into that packinghouse.

As per Section 3 of this Manual, growers of some commodities will be required to be registered for the purpose of field management controls for pests which are determined to be Quarantine Risk Group 2 pests. Commodity specific pests lists are at Appendix 2 of this Manual.

Where a packinghouse is packing fruits/vegetables that have Quarantine Risk Group 2 pests listed, all such fruits must only be sourced from registered growers of that commodity. Growers of citrus fruits whilst having the Risk Group 2 pest - Citrus leaf miner, will not need to be registered although they must maintain spray and monitoring diaries for control of this pest.

Growers have the opportunity to make registrations with AQIS, State Departments of Agriculture (or their equivalents), packinghouses or exporters. Where a grower makes application for registration with a packinghouse, the packinghouse is responsible to ensure:

. that AQIS State Regional Office is aware of the registration/acceptance and

- the packinghouse must ensure that all grower requirements as detailed at Section 5 of this Manual have/are being complied with and,
- the packinghouse will maintain records detailing audits of the grower property/block registered for the New Zealand BQA/IHS trade.

Packinghouses must have systems in place to ensure incoming produce is identified by grower and for commodities which have Quarantine Risk Group 2 pests that these commodities are segregated from any other fruits to minimise cross contamination of this produce.

6.2 Packinghouse Responsibilities - Commodity Specific

Packinghouses which are packing fruits/vegetables for New Zealand do not need to be specifically registered for the New Zealand export trade unless they are packing commodities with Risk Group 2 pests or have been delegated and accepted duties/responsibilities by exporters.

Packinghouses that are effecting treatments as defined in the BQA or in this Manual must be registered for that purpose.

Therefore all packinghouses which are packing fruits/vegetables under the “Area Freedom” treatment (Appendix 2 to the BQA), must be registered for this purpose.

Packinghouses must ensure that the fruits/vegetables they are packing are free of all quarantine pests as contained in the pest listings at Appendix 1 of this Manual. This means all Risk Groups 1,2 and 3 and any Regulated non plant pests which are listed, which are to be certified on the phytosanitary certificate. Graders, sorters and packers must be trained to be able to recognise all pests and symptoms and to record findings of these pests.

Packinghouses packing BQA/HIS commodities must perform a 600 unit inspection for each grower that makes up a consignment. This inspection does not replace an exporter or exporter delegate inspection for that commodity and must be undertaken regardless of exporter inspection requirements. Records of these inspections must be retained for audit purposes.

6.3 Inspection Requirements

Packinghouses must undertake grower line inspections for all consignments of New Zealand BQA/IHS produce. These inspections will be carried out using a 600 unit inspection sample for each grower making up the consignment. All inspection results will be recorded as per Inspection Record at Appendix 3.4 of this Manual.

The maximum time that can be run continuously for New Zealand is a 24 hour process. Therefore each daily run must be considered as one lot and all grower inspections must be undertaken on that day. A grower run cannot be continued over into a new day.

For packinghouses located in areas which are declared free of fruit fly, inspection staff must cut any fruits which are considered suspect (soft fruits, bruised or rot spots) and the results of the cutting will be recorded.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation and if so if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

6.3.1 Documentation

Where an exporter has delegated to the packinghouse the exporter inspection requirements and where that packing establishment requires AQIS to undertake inspection at the establishment, the packinghouse will provide copies of the delegation request and confirmation as required under Section 9.6.

6.4 Security and Supervision Responsibilities

Where a packinghouse has been delegated and accepted exporter responsibilities in accordance with directions contained in Section 9.9 of this Manual the packinghouse must undertake and record all functions so delegated to them and which may include the following;

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporters delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and/or Export Permit (EX 28).

6.5 Packinghouse Audits

AQIS will audit all packinghouses involved in BQA/HIS listed commodities for compliance with grower names and addresses and allocated numbers/codes, and as appropriate, training of staff in the identification of pests associated with the commodity/ies being packed and where necessary

identification, segregation and security of product whilst on the premises. Records pertaining to all the foregoing aspects will be checked for accuracy.

The frequency of audits of packinghouses will be at the discretion of the SEI in each state but there will be a minimum of one audit per packing season and where seasons are longer than 4 months, it is recommended a second audit should be scheduled each year.

6.5.1 Application for Registration

An initial audit will be performed prior to the commencement of the season for the purposes of ensuring that the packinghouse has systems in place that will meet the identification, segregation, inspection, security (and where applicable treatments) and recording requirements of the New Zealand BQA/IHS.

At least one additional audit will be undertaken during the packing season.

6.5.2 Continued Registration

At least one audit will be performed during the packing season.

Additional audits may be performed, where as a result of an earlier audit, non-conformances were detected and a reappraisal of the systems following corrective action may be considered necessary.

6.6 Suspension of Packinghouse Registration

AQIS may impose suspension of a packinghouse packing Quarantine Risk Group 2 pest list commodities should the packinghouse be found to be not performing its responsibilities in the required manner. Depending on the reasons for invoking suspension, such suspension may only affect trade for the New Zealand BQA/IHS and not other markets.

Packinghouses who do not have sufficiently trained staff, appropriate segregation and security and identification procedures, or detailed records of their New Zealand packing arrangements, may be subject to suspension.

SECTION 7. CERTIFICATION ASSURANCE ARRANGEMENTS - PACKINGHOUSE RESPONSIBILITIES

7.1 General Requirements

All fruits/vegetables for the New Zealand export trade must include grower numbers or equivalent codes and packinghouse numbers of each individual package. It is the exporters responsibility to ensure that the exporter name and address is on all packages.

Packinghouses located in areas declared to be free of fruit flies must have a register of all growers names and addresses and allocated grower numbers for all suppliers of New Zealand BQA/HIS commodities.

Should packinghouses located in fruit fly area freedom districts become involved in area freedom suspension zones, those packinghouses must be able to provide grower registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals must then have procedures for identification, segregation and packing processes to ensure “area free” fruits cannot be contaminated whilst on the establishment and/or surrounds.

It is recommended that packing establishments have contingency plans within their quality manuals to address additional procedures that would be required in the event of fruit fly outbreaks in their district. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

Packinghouses who have Certification Assurance Arrangements with AQIS may incorporate the required New Zealand systems into their Quality Manuals and be audited simultaneously with normal auditing requirements.

Packinghouses which have accredited CA Arrangements in place and who are packing commodities which do not have any Quarantine Risk Group 2 or 3 pests, and are not undertaking official disinfestation treatments, will not need to add any additional systems to their Quality Manuals.

However, packinghouses with CA Arrangements and which are packing commodities with Quarantine Risk Group 2 or 3 pests listed, will need to ensure that the quality systems, procedures and management ensures, that grower registration, commodity segregation, identification and inspections are performed to meet the New Zealand certification requirements. It is likely that some CA Quality Assurance Manuals will need to either be amended or have attached an Appendix to meet the new export requirements for New Zealand BQA/IHS commodities.

Packinghouses which are seeking CA accreditation for the New Zealand BQA/HIS, must have 5 joint inspections (packinghouse – AQIS) to assess packinghouse inspection staff to undertake inspections for New Zealand in accordance with the directions contained in this Manual and before CA accreditation can be given.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

7.1.1 Auditing for New Zealand Requirements

CA accredited packinghouses who incorporate BQA/IHS commodity responsibilities within their current Quality Manuals will be subject to normal audit regimes which will incorporate any specific New Zealand requirements.

CA accredited packinghouses who wish to leave specific New Zealand BQA/IHS requirements outside their other CA accreditation will have the two systems audited separately but within the usual audit schedules that apply to that establishment.

Packinghouses which have responsibility for registering growers and ensuring adequate field control monitoring and spray diaries are properly maintained for specific Quarantine Risk Group 2 pests, will have a percentage of those registered growers audited at the packinghouse schedule audits to ensure compliance with the New Zealand BQA/IHS is in effect.

Where required, packinghouses who elect to register growers of commodities of Quarantine Risk Group 2 pests, must also conduct audits of all their registered growers in the following manner;

. on initial registration
. following registration at least once during the growing season and
. in subsequent seasons, once during each growing season.

During AQIS CA audits, auditors will perform random audits of growers who are required to be registered under the BQA/IHS on the following basis;

. in the initial year of registration - 5% of all growers registered by the packinghouse
. subject to compliance with all requirements the previous year - reduce to 2 1/2% of all growers registered by the packinghouse or
. if nonconformances were detected at a previous audit - increase random selection of growers to 10% of all registered growers of that packinghouse.

Should a major nonconformance with the New Zealand BQA/IHS and the instructions contained in this Manual be detected at audit, the packinghouse will be suspended from the New Zealand trade in fruit fly host material immediately and depending on the type of nonconformance, suspension from the AQIS CA Arrangement may be considered. Such a decision will be given through the AQIS CA Contact Officer in that State in conjunction with State Regional Manager and Canberra Office.

7.1.2 CA - New Zealand Inspection Requirements

As most CA Arrangements are based on “in-line” process controls rather than “endpoint” inspection regimes, CA packinghouses are permitted to undertake the required inspection regimes as a “in-line” processes.

In-line inspection systems will be granted where the CA establishment has systems in place that;

. address grower field controls (horticulture extension officers, reference to crop monitors etc.), and
. have some form of formal receival inspection records,
. within the processing line have sorter and grader recording systems..

In order to properly document the required inspection for the New Zealand BQA/IHS, CA packinghouses will undertake “in-line” consignment line inspections according to the following;

TABLE 7

DETERMINING SAMPLE REQUIREMENTS
ACCREDITED AQIS CA ESTABLISHMENTS
IN-LINE PROCESS CONTROL

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 7 sets out possible sampling regimes that can be applied as in-line process controls within an accredited CA packing establishment. The maximum time that can be run continuously for New Zealand is a 24 hour process. It is extremely important that records showing this type of in-line process control are maintained for each consignment run for the New Zealand protocol.

All inspections undertaken as indicated in Table 7 must be undertaken by the Senior Quality Control Officer. Where inspections are performed as per Table 7, these are consignment line inspections and individual grower line inspections are not required.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation and if so if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

Packinghouses can make up any type of sampling system based on the above table but it is important to document exactly what regime is to be used before the production run is commenced and that the sampling regime is representative of the consignment/s being assembled.

The packinghouse requirements covered in Section 6 of this Manual pertaining to identification, segregation, security and records for all New Zealand destined produce must be part of the Quality Assurance Manuals submitted to AQIS for approval.

7.2 Documentation

The identity of the exporter in addition to the grower and packinghouse numbers will be included on all packages covered by the BQA/IHS.

For all product that is being transferred intrastate or interstate the following documentation will be required to ensure that the receiving company and AQIS inspector can verify the security and integrity of a consignment on arrival.

A declaration to the following effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not be exceeded."

Where a phytosanitary certificate is to be signed in other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

7.3 Post treatment Security

Where a CA packinghouse has accepted an exporter delegation for the security and loading supervision of BQA/HIS commodities the packinghouse will the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporters delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and laoding company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28).

SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES

8.1 Registration

In addition to normal AQIS registration requirements under the Export Control Act, all establishments who undertake either physical or chemical treatments for the disinfestation of fruit flies for export of host commodities to New Zealand, must be registered specifically for this purpose. Application for registration will be made directly to AQIS Regional Offices in the State where registration is required.

8.2 Process Controls

All treatment centres which are registered for the New Zealand BQA trade must have a system of process control and record keeping which can be audited at all times.

Treatment centres must have systems which demonstrate identification, segregation, process controls, separation of treated and untreated fruits, quarantine secure areas or quarantine secure packaging following treatment and supervision responsibilities when loading produce either direct to export or through exporters/freight forwarders.

Persons who are responsible for calibrating, measuring and recording will be appropriately trained to be able to undertake these responsibilities and understand there importance.

8.3 BQA Treatments - AQIS Supervision

Treatment centres will be subject to the following AQIS supervision during treatments;

8.3.1 Fumigation Centres

Where fumigation is being performed with the use of flexible tents, AQIS inspection staff will attend each fumigation which is being undertaken for the New Zealand BQA. AQIS will attend the treatment centre either at commencement of the treatment to be carried out or prior to the completion of the fumigation. AQIS officers will verify treatment dosages, calculations and gas retention general process controls for each fumigation treatment.

Treatment centres which are using fixed capacity fumigations (chambers of fixed tents), will be audited at the first fumigation treatment being performed for the New Zealand trade and then if substantial compliance is being effected 2 - 3 times during the season.

Fumigation centres must advise their local AQIS office, 24 hours in advance of intended fumigation treatments. If it is difficult for AQIS to be in attendance at the required times, arrangements will be made between the treatment centre and the local AQIS office which will enable the treatment to go ahead but define how AQIS will manage the required supervision requirements.

8.3.2 Cold Storage Centres

AQIS inspection staff will undertake supervision of each cold disinfestation treatment. In normal circumstances AQIS will be required to be in attendance when sensors and probes are calibrated both prior to and at the completion of each treatment. Inspection staff will also attend the cold disinfestation treatment centre once during the disinfestation period (normally about halfway through), to ensure that temperature recording is being maintained in the required manner.

Where cold disinfestation treatments are being undertaken using manual recording devices, AQIS inspection staff will attend for monitoring purpose at that treatment centre every 3-4 days during the treatment/s being undertaken.

8.3.3 Dimethoate Treatments

8.3.3.1 Waxed produce

The dimethoate treatment of waxed cucurbits is prohibited for export of produce to New Zealand. Where establishments are applying dimethoate treatments, the fruits/vegetables must complete the disinfestation treatment including complete drying of produce before any wax applications are made.

8.3.3.2 AQIS requirements

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment however, AQIS inspection staff will undertake analysis of chemical dipping strengths on the following basis;

. during the first year of a treatment centres registration,

  - each month

. where registration has been continuous and without a nonconformance,

  - twice during the treatment season.

In addition to the above AQIS analysis, treatment centres who undertake dimethoate dipping/spraying, will be required to have monthly analysis of the dipping strengths by a recognised agency. Results of these analysis will be retained and made available to AQIS authorised officers when requested.

8.4 AQIS Audits of Treatment Centres

AQIS will conduct audits of treatment centres on the following basis;

Fumigation Centres

One annual audit during the first 10 days of each season (to be conducted during a treatment) to verify that treatment centre operators are trained in their responsibilities and know what information is required to be recorded.

Cold Storage Centres

One annual audit during the first three treatments of each season to verify that all treatment centre responsibilities are being maintained.

Dimethoate Treatment Centres

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained and in the first year of operation, monthly audits during the operating season. For treatment centres who have undertaken successful audits in the first year, two audits per year/season thereafter as long as compliance with the New Zealand requirements is being maintained.

All Treatment Centres

Should non-conformances be detected during audit schedules covered above, additional audits maybe required to ensure corrective actions have been implemented.

Should major non-conformances be detected during audit, the treatment centre maybe suspended from the New Zealand BQA/IHS trade until AQIS is satisfied corrective action has been implemented and that systems are established to ensure that the nonconformance will not reocccur.

SECTION 9. EXPORTER RESPONSIBILITIES

9.1 Registration Requirements

All exporters of BQA/IHS products to New Zealand must be registered with AQIS for this purpose. Exporter applications will be made to the AQIS State Office where the exporters business is conducted.

Applications for registration will include details of the commodities and treatment pathways (where it is known) that the exporter intends to use to meet with the conditions stipulated for export of those commodities to New Zealand.

Applications for registration where, details of the treatment centres are at that time unknown, will be accepted by AQIS but exports of that/those commodities will not be permitted until the exporter advises AQIS of the treatment centres for those commodities that registration is being made for becomes known.

9.2 Exporter Responsibilities

Whilst exporters can delegate some duties, the exporter will remain responsible for all activities which pertain to the inspection, security and loading of product following treatment.

Exporters must ensure at all times:

. either directly or by delegation, that product security during loading, transporting and export consignment consolidation is not compromised and that there can be no substitution or cross infestation of product following treatment,

. that exporters inspection requirements (either exporter or exporter delegate) as detailed in this Manual, are performed by staff that are qualified to do so and that records are kept for all inspections performed,

. ensure inspection records are presented for each grower lot presented for AQIS inspection,

. must liaise with AQIS/State Officers as necessary to advise of product movement and inspection requirements,

. are responsible for all documentation including phytosanitary certificate endorsements that are required for product to enter New Zealand.

9.3 Exporter Inspection

Where grower line inspections are performed by the Exporter, full details of the inspection performed will be recorded.

Inspections will only be undertaken following completion of the disinfestation treatments.

All Exporter inspections will be performed at the 600* unit rate and all units within the sample will be inspected.

NOTE Inspections can be carried out to other sampling sizes, as per the sampling plans in Section 1 if desired.

Exporters will ensure that all staff undertaking inspection duties are properly trained in pest and weed seed identification for the pests and weedseeds which are of a quarantine concern to New Zealand.

During exporter inspections, any soft, bruised or rot spot fruits will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation and if so that all larvae are dead. The results of all fruits which are cut will be recorded on the inspection sheets.

A copy of the "Inspection Record" together with other documentation relating to the shipment will be held on file for 2 years and be subject to AQIS/MAF audit.

9.4 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections, exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed including any that may not have been forwarded to New Zealand. ie. sold on the domestic or other export markets. New Zealand will inspect as individual consignments on arrival.

Each such procedure must have AQIS approval before implementation.

NOTE: The "split consignment" procedures cannot be implemented until the Senior Inspector has approved that the necessary documentation and record keeping is satisfactory and auditable.

This procedure will allow one inspection at the fee for service rate and the first phytosanitary certificate free. All subsequent phytosanitary certificates both originals or certified copies will be charged for at the rate determined in the Fees Orders.

For split consignments where exporters/importers want to reduce the MAF on arrival inspection, exporters must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

. notification of consignment details to MAF as they occur,

. the New Zealand communication links (importer and MAF contacts),

. flow chart detailing how the phytosanitary certificate moves through the system.

9.5 Untreated Produce being forwarded from Country Areas

Growers/Packinghouses who are forwarding untreated Risk Group 2 fruits from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate, signed by an authorised AQIS officer), or a signed copy of an EX 28 Notice of Intention to Export or, a grower declaration form, attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide Notice of Intention to Export (EX 28) and any other relevant documentation to AQIS, prior to any AQIS inspection being undertaken.

9.6 Delegation of Inspection

Where responsibility for the export inspection is delegated to another party, this will be done in writing with the delegate acknowledging in writing, their responsibilities in so accepting the delegation. Copies of documentation for delegation and acceptance of these duties will be held on both companies filing systems.

Where the exporter has delegated the Exporter Inspection requirements, the delegated inspection person will perform individual 600 unit (or equivalent) consignment line inspections regardless of any "in-line quality control" inspections that may have been undertaken and recorded.

NOTE Accredited AQIS CA establishments are not required to undertake end-point inspections where their quality systems give procedures for a 600 unit inspection to be completed in-line and where the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

Any person/s who are delegated the responsibility for undertaking exporter inspections must have the ability to identify those pests and weedseeds that are of a quarantine concern to New Zealand.

All inspections whether by exporter staff or delegated persons will be performed in an area with a minimum light of 600 lux and include the use of magnifying lens x10 where appropriate.

Inspection procedures must include cutting of damaged fruits as detailed at Section 9.3 of this Manual. Records of all fruits/vegetable cut will be recorded on the inspection sheets.

All inspections performed by exporter or delegated persons will be recorded on an "Inspection Record" and held on file by that exporter/delegate. A copy of this record must be presented with the line/lot for AQIS inspection.

9.7 Documentation

The identity of the exporter in addition to the grower and packinghouse numbers will be included on all packages covered by the BQA/IHS.

A declaration to this effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not be exceeded."

9.8 Procedures for Exporter Rejected Produce

Should an exporter or exporters' delegate during inspection of produce, detect live fruit fly infestation in any grower lot, all produce from that grower lot (even if previously passed but not shipped), will be securely segregated from all other NZ BQA produce and identified as not suitable for export to New Zealand.

Exporter or exporters' delegate is responsible for immediately notifying the AQIS officers in the region of the detection, the grower involved and details of the treatment centre who performed the disinfestation treatment (for treated produce only), and what action they are taking to ensure there is no cross contamination of other BQA/IHS produce.

AQIS Senior Export Inspector in that State will formally advise the treatment centre of the possible treatment failure and that the centre will be suspended pending an audit of the treatment. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the detection of live fruit fly, reinstatement of the treatment centre for the New Zealand trade may be permitted.

Should during exporter inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS officers in that region of the detection. The fruit must be immediately identified as failed for NZ and segregated from all other New Zealand destined fruits/vegetables.

AQIS inspection staff must notify the grower of this produce of the failure and the grower will be placed on suspension and subject to an audit of his property to learn the reason for failure. If the audit identifies nonconformances but which can be corrected immediately, consideration will be given to allow the grower to take those corrective actions and be reinstated for the New Zealand program.

9.9 Post treatment Security

An exporter will nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporters delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and laoding company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28) and is to be faxed through to the AQIS office in the originating area/location..

9.10 Security of Produce - Exporter/Freight Forwarder Premises

Treated produce on arrival at exporters' premise or Freight Forwarder Depot, will be inspected by AQIS officers to ensure that the security of the consignment is intact. Inspectors will ensure that the produce is in a secure/safe condition (no tearing of shrinkwrap or mesh bags) and that documentation is correct with contents of the load and is accompanied (if required) by a treatment certificate.

Export shipping or airfreight containers will be inspected by freight forwarding agent or exporter for cleanliness and condition, (any holes in container will be taped over). Details of container, and its soundness and cleanliness will be recorded on "Container Report Sheet" Appendix 3.12 and signed by the Exporter/Airfreight Forwarding Agent.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

9.11 Audits - Exporters

AQIS will perform an audit of all exporters registered for the New Zealand program annually. All relevant documentation for all consignments must be made available to the AQIS authorised Officer.

9.12 Audits -Exporters Delegate

A minimum of two audits per year will be conducted by AQIS on persons with exporter delegate responsibilities.

9.13 Exporter/Exporter Delegate - Non Compliance

An Exporter/Exporter Delegate may be suspended from the BQA/IHS if they are not meeting their obligations under the BQA/IHS. Non-compliance includes :

. failing to provide up to date and correct documentation, including Inspection Records for New Zealand destined product
. failing to correctly draw and sample product

. failing to appropriately train (or be trained), Quality Control inspectors for the purposes of inspecting BQA/IHS product
. failing to segregate BQA/IHS treated/passed for export product from non treated product
. failing to fulfil any other requirement/responsibility as outlined in this section of the Manual.

Additional audits (scheduled by the SI (Exports)) will be scheduled where an audit reveals non-conformities occurring within the exporter/exporter delegate responsibilities

The exporter/exporter delegate audit costs will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made between AQIS and the parties involved.

SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES

10.1 Fruit Fly Area Freedom - Management Requirements

10.1.1 Area Freedom - Fruit Flies

For the purpose of the BQA/IHS Arrangement, area freedom from fruit flies is recognised as a treatment. All components of the appendices under the Arrangement are applicable to produce grown in areas free of fruit flies with the treatment being area freedom rather than fumigation, cold disinfestation, etc.

Areas considered to be free of fruit flies, unless a current outbreak is declared in the area are;

. Tasmania
. Riverland area of South Australia surrounding the towns/cities of Murtho Renmark, Loxton, Berri, Barmera, Waikerie, Cadell and the township of Mypolonga.
. Sunraysia District of Victoria surrounding the towns/cities of Mildura, Merbein, Nangiloc/Colignan, Robinvale, Nyah and Nyah West, Swan Hill and Barham
. Sunraysia districts of New South Wales surrounding the towns of Dareton, Curlwaa and Coomealla,
. Murrumbidgee Irrigation Area of New South Wales including the towns/cities of Griffith, Leeton and Hillston.

10.1.2 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Surveys to demonstrate that the areas are fruit fly free.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of Fruit Flies and managed under the Tri-state agreement between the States of New South Wales, Victoria and South Australia and

- which reflect the requirements of New Zealand NASS Standard 158.03.06., the Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

- management and control procedures for each area which have been submitted to and accepted by MAF as meeting all the requirements (or equivalence) with the New Zealand NASS Standard 158.03.06.

Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. These procedures and controls are documented such that they can be readily demonstrated to, and

audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

10.1.3 Outbreak

Area freedom will be assumed unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. one or more larvae or pupae are found in locally grown fruit, or

. two fruit flies are trapped within 400 metres of each other, within a 14-day period.

In this case, area freedom from fruit flies will be suspended until a period, equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of NASS Standard 158.03.06, the suspension period will be reduced to;

- one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site or 30kms should there be two outbreak sites within 5 kms.

State Departments must advise AQIS Canberra Office of any amendments to their management procedures immediately they are intended to be implemented. Canberra Office will forward amendments to these management documents to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (and at least annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable New Zealand NASS Standard 158.03.06..

This Manual at Appendix 2 lists dates of declaration of outbreaks and corresponding generation/dates to assess subsequent reinstatement of area freedom for areas which are subjected to outbreak conditions.

10.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom from fruit flies has been approved), must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency of all traps will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS

11.1 Redback Spiders - *Lactrodectus hasselti*

New Zealand Ministry of Health have declared the pest redback spider, a pest of human health concern and have requested MAF to ensure that all consignments of tablegrapes arriving in New Zealand do not have any live pests of this type.

MAF have directed that AQIS must undertake either stringent field control programs to eliminate this pest in the field or undertake an agreed treatment that is effective against red back spiders. A sulphur dioxide - carbon dioxide fumigation treatment has been accepted for this purpose.

The Australian tablegrape industry have opted for mandatory fumigation.

Fumigation details are;

A mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

Fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide- Carbon Dioxide fumigants.

Section 3 of this Manual details the requirements and responsibilities which fumigation treatment centres must comply with and fumigation applied to tablegrapes must meet the listed criteria.

AQIS inspection staff who are undertaking phytosanitary certification for tablegrapes must sight fumigation treatment records clearly identifying the products treated with dates, time and dose rates nominated together with exporter details (where known) packing establishment and grower numbers details before signing the phytosanitary certificate.

Tablegrape fumigators will be audited for compliance with this Section and Section 3 of this Manual.

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES

AVOCADO

Persea americana

Avocado can be exported to New Zealand under the Area Freedom from Fruit Flies Appendix 1 to the BQA/IHS.

Avocado can also be exported to New Zealand under the Cold Storage disinfestation Treatment Appendix No. 5 of the BQA/IHS.

Growers and packinghouses must be registered to grow and pack avocado for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

-
-
-
avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly

Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper

Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Ascomycota	
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata	anthracnose
(anamorph *Colletotrichum gloeosporioides*)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis perseae	

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Botryosphaeriaceae
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana (anamorph *Botrytis cinerea*) — ear rot

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Lasiodiplodia theobromae — stem-end rot
Unknown Coelomycetes
Unknown Coelomycetes
Colletotrichum acutatum — -

Non-regulated non plant pests/organisms

None

BANANA

Musa spp.

The export of Bananas to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera jarvisi	Javis' fruit fly
Bactrocera papayae	papaya fruit fly
Bactrocera tryoni	Queensland fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly

1.2 Banana, *Musa* spp.

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) are allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Chrysomelidae	
Geloptera miracula	chrysomelid beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida discopunctulata	leaf beetle
Curculionidae	
Cosmopolites sordidus	banana root borer
Listroderes difficilis	vegetable weevil
Polytus mellerborgi	weevil borer
Scarabaeidae	
Dermolepida albohirtum	greyback cane beetle
Rhopaea magnicornis	large pasture scarab
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Calliphoa imperialis	blow fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Fabrictilis australis	squash bug
Lygaeidae	
Graptostethus servus	lygaeid bug
Homoptera	
Aleyrodidae	
Aleurodicus spiniferis	coconut whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophyllis	cyanophyllum scale
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Pseudococcidae	
Planococcus pacificus	citrus mealybug
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Lepidoptera	
Lymantriidae	
Orgyia australis	vapourer moth

Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Helicoverpa assulta	cape gooseberry budworm
Hermimia cenoealis	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Lamprosema octasema	banana scab moth
Tirathaba rufivena	fruit borer
Tineidae	
Opogona glycyphaga	sugarcane bud moth
Torticidae	
Isotenes miserana	orange fruitborer
Xenothictis sciaphila	tortricid
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Thysanoptera	
Thripidae	
Chaetanaphothrips signipennis	banana rust thrips
Thrips florum	flower thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phyllocoptruta musae	eriophyid mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Tetranychus marianae	bean mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia musae (anamorph *Phyllostict musae)*	-
Phyllachorales	
Phyllachoraceae	
Phyllachora musicola	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis musicola	-
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora hayi	-
Deightoniella torulosa	-
Moniliaceae	
Verticillium theobromae	-
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora palmivora	phytophthora fruit rot

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Pinnaspis aspidistrae	fern scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Hercinothrips bicinctus	banana silvering thrips

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyhagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Tetranychus lambi	strawberry spider mite
Tetranychus urtiae	twospotted spider mite

Fungus

Ascomycota
Microascales
Unknown Microascales
Ceratocystis paradoxa
(anamorph *Chalara paradoxa*)
Unknown Ascomycota
Magnaporthaceae
Magnaporthe grisea
(anamorph *Pyriculara grisea*)

Non-regulated non plant pests/organisms

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under the Area Freedom from Fruit Flies Treatment Appendix 1 of the BQA/IHS.

Citrus fruits can also be exported to New Zealand under the Cold Storage disinfestation Treatment Appendix No. 5 of the BQA/IHS.

The pest Citrus leaf miner whilst listed as a Risk Group 2 pest does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Pest Scientific Name	Common Name
Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	**Common Name**
Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil

Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper

Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips

Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	
Merophyas divulsana	lucerne leafroller
Thysanoptera	
Thripidae	

Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida
Acarina
Eriophyidae

Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tenuipalpidae

Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite

Tetranychidae

Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non plant pests/organisms

None

GRAPE

Vitis vinifera

Grapes can be exported to New Zealand under Area Feedom from Fruit Flies Appendix 1 of the BQA/IHS and
Grapes can be exported to New Zealand under Cold Storage Treatment Appendix 5 of the BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

Growers and packinghouses must be registered for the grape protocol for the pests/contaminants - weedseeds which are subjected to vineyard hygiene management controls.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterrranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Weed Seeds - Prohibited Species

Baccaris spp
Cenchrus spp (except *C ciliaris*)
Chondrilla juncea - skeleton weed
Cyperus spp (except *C. brevifolius, C. eragrostis, C. esculentus, and C. rotundus*)
Erogrostis curvula - African love grass
Lycium spp. (excepting *L. chinese* and *L. ferocissimum*)

Pennisetum alopecuroides - Chinese pennisetum
Pennisetum macrourum - African feather grass

Phragmites spp.
Solanum elaeagnifolium - Silver leaf nightshade
Sorghum × *almum* - Columbus grass
Sorghum halepense - Johnson grass
Tribules spp. - caltrop

Xanthium spp. (excepting *X. spinosum*)

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Alteica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorihinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala spp.	green scarab beetles
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhococidae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Hymenoptera	
Formicidae	
Componotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	

Agrotis munda	brown cutworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	leafrollers
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips

Mite

Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Spider

Arachnida	
Araneae	
Theridiidae	
Lactrodectus hasselti	Australian red-back spider

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Coccus persicae	grapevine scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Tortiricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothritps haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Colomerus vitis	grape erineum mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus urticae	twospotted spider mite

Non-regulated non plant pests/organisms

None

MANGO
Mangifera indica

The export of Mango to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Aspidiotus destructor	coconut scale
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Ischnaspis longirostris	black thread scale
Phenacaspis dilatata	mango scale
Flatidae	
Colgaroides acuminata	mango planthopper

Lepidoptera	
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Penicillaria jocosatrix	mango shoot caterpillar
Peperita euthysticha	mango tipborer
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Regulated non-quarantine pests

None

Regulated non-plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Sternochetus mangiferae	mango seed weevil
Homoptera	
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite

Non-regulated non plant pests/organisms

None

PAPAYA

Carica papaya

The export of Papaya to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha suspensa	Caribbean fruit fly
Bactrocera cucurbitae	melon fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Homoptera	
Cicadellidae	
Orosius argentatus	brown leafhopper
Diaspididae	
Aonidiella orientalis	oriental yellow scale
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Mite

Arachnida	
Acarina	
Tetranychidae	
Tetranychus desertorum	desert spider mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus phoenicis	passionvine mite

Non-regulated non plant pests/organisms

None

PINEAPPLE

Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarnatine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle

Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla
Unknown Symphyla
Symphylidae
Hanseniella sp. symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetes
Dematiaceae
Thielaviopsis paradoxa
Moniliaceae
Penicillium funiculosum

Bacterium
-
-
Enterobacteriaceae
Erwinia ananas marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None
Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae
Iridomyrmex glaber black house ant
Paratrechina vaga ant
Tapinoma sp. ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin's flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps
Mite	
Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite
Nematode	
Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode

Fungus

Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus

-	
-	
-	
tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	**Common Name**
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

POMEGRANATE
Punica granatum

Pomegranate can be exported to New Zealand under the Area Freedom from Fruit Flies Appendix 1 of the BQA/IHS.

Growers and packinghouses of pomegranate do not need to be specifically registered for the New Zealand program requirements.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Hemiptera	

Lygaeidae	
Oxycarenus arctatus	coon bug
Homoptera	
Aphididae	
Aphis spiraecola	spirea aphid
Lepidoptera	
Pyralidae	
Ectomyelois sp.	carob moth

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Aphididae	
Aphis gossypii	cotton aphid
Aulacorthum circumflexum	mottled arum aphid
Myzus ornatus	ornate aphid
Myzus persicae	green peach aphid

Mite

Arachnida	
Acarina	
Tetranychidae	
Tetranychus spp.	spider mites

Non-regluated non plant pests/organisms

None

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under the Area Freedom from Fruit Fly Appendix 1 to the BQA/IHS.

Strawberries can also be exported to New Zealand under the Mthyl Bromide fumigation Treatment Appendix 3 to the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

1.9 Strawberry, *Fragaria* spp.

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers

Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite bean spider mite
Tetranychus ludeni	
Tetranychus urticae	twospotted spider mite

Myriapod

Diplopode
Julida
Blaniulidae
Blaniulua guttulatus — spotted snake millipede

Mollusc

Gastropoda
Stylommatophora
Helicidae
Helix aspersa — common garden snail
Limacidae
Deroceras panormitanum — brown field slug
Deroceras reticulatum — grey garden slug
Milax gagates — black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Exports of tomatoes to New Zealand can be made under the following Treatments;

The tomato varieties, Floradade, Tristar, Hayslip, Sunny and Duke can be exported under the Dimethoate Treatment Appendix No. 4 to the BQA/IHS.

Tomatoes supplied under the Area Freedom Treatment Appendix No.1 of the BQA/IHS, can be of any variety but the variety name should be included on the phytosanitary certificate although this is not mandatory.

As there are no Risk Group 2 pests listed, growers and packinghouses do not need to be specifically registered for the New Zealand trade. However, packinghouses who are undertaking dimethoate treatments shall be registered with AQIS before packing and treatments can be inspected/supervised.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pest (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

1.10 Tomato, *Lycopersicon esculentum*

Quarantine: Risk group 1 pests (actionable) – Nil permitted in an inspected sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Coccinellidae	
Epilachna sp.	leaf-eating ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	
Antherigona orientalis	muscid fly
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	green stink bug
Plautia affinis	
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Graphognathus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemitptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Lepidoptera	
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanoptera	
Thripidae	
Thrips tabaci	Onion thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tetranychidae	
Tetranychus uricae	two spotted spider mite

Non-regulated non plant pests/organisms

None

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT

DAY LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	01 - Feb	01 - Mar	05 - Mar	27 - Apr
02 - Jan	02 - Feb	02 - Mar	06 - Mar	03 - May
03 - Jan	03 - Feb	03 - Mar	07 - Mar	05 - May
04 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
05 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
06 - Jan	05 - Feb	05 - Mar	09 - Mar	16 - May
07 - Jan	06 - Feb	06 - Mar	11 - Mar	19 - Sep
08 - Jan	07 - Feb	07 - Mar	13 - Mar	25 - Sep
09 - Jan	08 - Feb	08 - Mar	14 - Mar	30 - Sep
10 - Jan	09 - Feb	09 - Mar	16 - Mar	02 - Oct
11 - Jan	10 - Feb	10 - Mar	17 - Mar	04 - Oct
12 - Jan	11 - Feb	11 - Mar	18 - Mar	06 - Oct
13 - Jan	12 - Feb	12 - Mar	19 - Mar	08 - Oct
14 - Jan	13 - Feb	13 - Mar	20 - Mar	10 - Oct
15 - Jan	14 - Feb	14 - Mar	21 - Mar	11 - Oct
16 - Jan	15 - Feb	15 - Mar	23 - Mar	11 - Oct
17 - Jan	16 - Feb	16 - Mar	25 - Mar	12 - Oct
18 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
19 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
20 - Jan	19 - Feb	19 - Mar	30 - Mar	18 - Oct
21 - Jan	20 - Feb	20 - Mar	02 - Apr	23 - Oct
22 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
23 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
24 - Jan	23 - Feb	23 - Mar	04 - Apr	25 - Oct
25 - Jan	24 - Feb	24 - Mar	07 - Apr	28 - Oct
26 - Jan	25 - Feb	25 - Mar	09 - Apr	29 - Oct
27 - Jan	26 - Feb	26 - Mar	11 - Apr	31 - Oct
28 - Jan	27 - Feb	27 - Mar	12 - Apr	01 - Nov
29 - Jan	28 - Feb	28 - Mar	14 - Apr	02 - Nov
30 - Jan	02 - Mar	30 - Mar	17 - Apr	04 - Nov
31 - Jan	03 - Mar	31 - Mar	21 - Apr	07 - Nov
01 - Feb	04 - Mar	01 - Apr	23 - Apr	08 - Nov
02 - Feb	05 - Mar	02 - Apr	27 - Apr	10 - Nov
03 - Feb	06 - Mar	03 - Apr	03 - May	13 - Nov
04 - Feb	07 - Mar	04 - Apr	05 - May	13 - Nov
05 - Feb	08 - Mar	05 - Apr	14 - May	15 - Nov
06 - Feb	09 - Mar	06 - Apr	16 - May	16 - Nov
07 - Feb	11 - Mar	08 - Apr	19 - Sep	23 - Nov
08 - Feb	13 - Mar	10 - Apr	25 - Sep	25 - Nov

2.1 Sunraysia district

09 - Feb	14 - Mar	11 - Apr	30 - Sep	27 - Nov
10 - Feb	16 - Mar	13 - Apr	02 - Oct	28 - Nov
11 - Feb	17 - Mar	14 - Apr	04 - Oct	29 - Nov
12 - Feb	18 - Mar	15 - Apr	06 - Oct	29 - Nov
13 - Feb	19 - Mar	16 - Apr	08 - Oct	30 - Nov
14 - Feb	20 - Mar	17 - Apr	10 - Oct	01 - Dec
15 - Feb	21 - Mar	18 - Apr	11 - Oct	02 - Dec
16 - Feb	23 - Mar	20 - Apr	11 - Oct	02 - Dec
17 - Feb	25 - Mar	22 - Apr	12 - Oct	02 - Dec
18 - Feb	27 - Mar	24 - Apr	14 - Oct	03 - Dec
19 - Feb	28 - Mar	25 - Apr	14 - Oct	03 - Dec
20 - Feb	30 - Mar	27 - Apr	18 - Oct	05 - Dec
21 - Feb	02 - Apr	30 - Apr	23 - Oct	07 - Dec
22 - Feb	03 - Apr	01 - May	24 - Oct	09 - Dec
23 - Feb	04 - Apr	02 - May	25 - Oct	09 - Dec
24 - Feb	04 - Apr	02 - May	25 - Oct	09 - Dec
25 - Feb	07 - Apr	05 - May	28 - Oct	11 - Dec
26 - Feb	09 - Apr	07 - May	29 - Oct	11 - Dec
27 - Feb	11 - Apr	09 - May	31 - Oct	13 - Dec
28 - Feb	12 - Apr	10 - May	01 - Nov	14 - Dec
01 - Mar	14 - Apr	12 - May	02 - Nov	14 - Dec
02 - Mar	15 - Apr	13 - May	03 - Nov	14 - Dec
03 - Mar	17 - Apr	15 - May	04 - Nov	15 - Dec
04 - Mar	21 - Apr	19 - May	07 - Nov	17 - Dec
05 - Mar	23 - Apr	21 - May	08 - Nov	18 - Dec
06 - Mar	27 - Apr	25 - May	10 - Nov	19 - Dec
07 - Mar	03 - May	31 - May	13 - Nov	22 - Dec
08 - Mar	05 - May	02 - Jun	13 - Nov	22 - Dec
09 - Mar	14 - May	11 - Jun	15 - Nov	24 - Dec
10 - Mar	16 - May	13 - Jun	16 - Nov	25 - Dec
11 - Mar	09 - Sep	07 - Oct	21 - Nov	29 - Dec
12 - Mar	19 - Sep	17 - Oct	23 - Nov	29 - Dec
13 - Mar	24 - Sep	22 - Oct	25 - Nov	31 - Dec
14 - Mar	25 - Sep	23 - Oct	25 - Nov	31 - Dec
15 - Mar	30 - Sep	28 - Oct	27 - Nov	01 - Jan
16 - Mar	30 - Sep	28 - Oct	27 - Nov	01 - Jan
17 - Mar	02 - Oct	30 - Oct	28 - Nov	02 - Jan
18 - Mar	04 - Oct	01 - Nov	29 - Nov	03 - Jan
19 - Mar	06 - Oct	03 - Nov	29 - Nov	03 - Jan
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26 - Mar	12 - Oct	09 - Nov	02 - Dec	06 - Jan
27 - Mar	13 - Oct	10 - Nov	03 - Dec	07 - Jan
28 - Mar	14 - Oct	11 - Nov	03 - Dec	07 - Jan
29 - Mar	14 - Oct	11 - Nov	03 - Dec	07 - Jan
30 - Mar	16 - Oct	13 - Nov	04 - Dec	08 - Jan
31 - Mar	18 - Oct	15 - Nov	05 - Dec	09 - Jan
01 - Apr	20 - Oct	17 - Nov	06 - Dec	10 - Jan

2.1 Sunraysia district

02 - Apr	21 - Oct	18 - Nov	06 - Dec	10 - Jan
03 - Apr	23 - Oct	20 - Nov	07 - Dec	10 - Jan
04 - Apr	24 - Oct	21 - Nov	09 - Dec	11 - Jan
05 - Apr	25 - Oct	22 - Nov	09 - Dec	11 - Jan
06 - Apr	26 - Oct	23 - Nov	09 - Dec	11 - Jan
07 - Apr	27 - Oct	24 - Nov	10 - Dec	12 - Jan
08 - Apr	28 - Oct	25 - Nov	11 - Dec	13 - Jan
09 - Apr	28 - Oct	25 - Nov	11 - Dec	13 - Jan
10 - Apr	29 - Oct	26 - Nov	11 - Dec	13 - Jan
11 - Apr	30 - Oct	27 - Nov	12 - Dec	14 - Jan
12 - Apr	31 - Oct	28 - Nov	13 - Dec	15 - Jan
13 - Apr	01 - Nov	29 - Nov	14 - Dec	16 - Jan
14 - Apr	02 - Nov	30 - Nov	14 - Dec	16 - Jan
15 - Apr	02 - Nov	30 - Nov	14 - Dec	16 - Jan
16 - Apr	03 - Nov	01 - Dec	14 - Dec	16 - Jan
17 - Apr	04 - Nov	02 - Dec	15 - Dec	17 - Jan
18 - Apr	04 - Nov	02 - Dec	15 - Dec	17 - Jan
19 - Apr	05 - Nov	03 - Dec	16 - Dec	17 - Jan
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21 - Apr	07 - Nov	05 - Dec	17 - Dec	18 - Jan
22 - Apr	07 - Nov	05 - Dec	17 - Dec	18 - Jan
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16 - May	16 - Nov	14 - Dec	25 - Dec	26 - Jan
17 - May	16 - Nov	14 - Dec	25 - Dec	26 - Jan
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31 - May	18 - Nov	16 - Dec	26 - Dec	28 - Jan
01 - Jun	18 - Nov	16 - Dec	26 - Dec	28 - Jan
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03 - Jun	18 - Nov	16 - Dec	26 - Dec	28 - Jan
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27 - Jun	18 - Nov	16 - Dec	26 - Dec	28 - Jan
28 - Jun	18 - Nov	16 - Dec	26 - Dec	28 - Jan
29 - Jun	18 - Nov	16 - Dec	26 - Dec	28 - Jan
30 - Jun	18 - Nov	16 - Dec	26 - Dec	28 - Jan
01 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
02 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
03 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan

2.1 Sunraysia district

04 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
05 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
06 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
07 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
08 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
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15 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
16 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
17 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
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21 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
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28 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
29 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
30 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
31 - Jul	18 - Nov	16 - Dec	26 - Dec	28 - Jan
01 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
02 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
03 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
04 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
05 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
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20 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
21 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
22 - Aug	18 - Nov	16 - Dec	26 - Dec	28 - Jan
23 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan

2.1 Sunraysia district

24 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
25 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
26 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
27 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
28 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
29 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
30 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
31 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
01 - Sep	19 - Nov	17 - Dec	27 - Dec	29 - Jan
02 - Sep	19 - Nov	17 - Dec	27 - Dec	29 - Jan
03 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
04 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
05 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
06 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
07 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
08 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
09 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
10 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
11 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
12 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
13 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
14 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
15 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
16 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
17 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
18 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
19 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
20 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
21 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
22 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
23 - Sep	24 - Nov	22 - Dec	30 - Dec	31 - Jan
24 - Sep	24 - Nov	22 - Dec	30 - Dec	31 - Jan
25 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
26 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
27 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
28 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
29 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
30 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
01 - Oct	27 - Nov	25 - Dec	01 - Jan	02 - Feb
02 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
03 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
04 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
05 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
06 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
07 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
08 - Oct	30 - Nov	28 - Dec	05 - Jan	05 - Feb
09 - Oct	30 - Nov	28 - Dec	05 - Jan	05 - Feb
10 - Oct	01 - Dec	29 - Dec	06 - Jan	06 - Feb
11 - Oct	01 - Dec	29 - Dec	06 - Jan	06 - Feb
12 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb
13 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb

2.1 Sunraysia district

14 - Oct	03 - Dec	31 - Dec	07 - Jan	07 - Feb
15 - Oct	03 - Dec	31 - Dec	07 - Jan	07 - Feb
16 - Oct	04 - Dec	01 - Jan	08 - Jan	08 - Feb
17 - Oct	04 - Dec	01 - Jan	08 - Jan	08 - Feb
18 - Oct	05 - Dec	02 - Jan	09 - Jan	09 - Feb
19 - Oct	05 - Dec	02 - Jan	09 - Jan	09 - Feb
20 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb
21 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb
22 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb
23 - Oct	07 - Dec	04 - Jan	10 - Jan	10 - Feb
24 - Oct	07 - Dec	04 - Jan	10 - Jan	10 - Feb
25 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
26 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
27 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
28 - Oct	10 - Dec	07 - Jan	12 - Jan	12 - Feb
29 - Oct	11 - Dec	08 - Jan	13 - Jan	13 - Feb
30 - Oct	11 - Dec	08 - Jan	13 - Jan	13 - Feb
31 - Oct	12 - Dec	09 - Jan	14 - Jan	14 - Feb
01 - Nov	13 - Dec	10 - Jan	15 - Jan	15 - Feb
02 - Nov	14 - Dec	11 - Jan	16 - Jan	16 - Feb
03 - Nov	14 - Dec	11 - Jan	16 - Jan	16 - Feb
04 - Nov	14 - Dec	11 - Jan	16 - Jan	16 - Feb
05 - Nov	15 - Dec	12 - Jan	17 - Jan	17 - Feb
06 - Nov	16 - Dec	13 - Jan	17 - Jan	17 - Feb
07 - Nov	17 - Dec	14 - Jan	18 - Jan	17 - Feb
08 - Nov	17 - Dec	14 - Jan	18 - Jan	17 - Feb
09 - Nov	18 - Dec	15 - Jan	19 - Jan	19 - Feb
10 - Nov	19 - Dec	16 - Jan	21 - Jan	21 - Feb
11 - Nov	19 - Dec	16 - Jan	21 - Jan	21 - Feb
12 - Nov	20 - Dec	17 - Jan	22 - Jan	21 - Feb
13 - Nov	21 - Dec	18 - Jan	23 - Jan	23 - Feb
14 - Nov	22 - Dec	19 - Jan	23 - Jan	23 - Feb
15 - Nov	23 - Dec	20 - Jan	25 - Jan	25 - Feb
16 - Nov	24 - Dec	21 - Jan	25 - Jan	25 - Feb
17 - Nov	25 - Dec	22 - Jan	26 - Jan	26 - Feb
18 - Nov	26 - Dec	23 - Jan	28 - Jan	28 - Feb
19 - Nov	26 - Dec	23 - Jan	28 - Jan	28 - Feb
20 - Nov	27 - Dec	24 - Jan	29 - Jan	02 - Mar
21 - Nov	28 - Dec	25 - Jan	29 - Jan	02 - Mar
22 - Nov	29 - Dec	26 - Jan	30 - Jan	03 - Mar
23 - Nov	29 - Dec	26 - Jan	30 - Jan	03 - Mar
24 - Nov	29 - Dec	26 - Jan	30 - Jan	03 - Mar
25 - Nov	30 - Dec	27 - Jan	31 - Jan	04 - Mar
26 - Nov	31 - Dec	28 - Jan	01 - Feb	05 - Mar
27 - Nov	31 - Dec	28 - Jan	01 - Feb	05 - Mar
28 - Nov	01 - Jan	29 - Jan	02 - Feb	06 - Mar
29 - Nov	02 - Jan	30 - Jan	03 - Feb	07 - Mar
30 - Nov	03 - Jan	31 - Jan	04 - Feb	08 - Mar
01 - Dec	05 - Jan	02 - Feb	05 - Feb	09 - Mar
02 - Dec	06 - Jan	03 - Feb	06 - Feb	11 - Mar
03 - Dec	06 - Jan	03 - Feb	06 - Feb	11 - Mar

2.1 Sunraysia district

04 - Dec	07 - Jan	04 - Feb	07 - Feb	13 - Mar
05 - Dec	08 - Jan	05 - Feb	08 - Feb	14 - Mar
06 - Dec	09 - Jan	06 - Feb	09 - Feb	16 - Mar
07 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
08 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
09 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
10 - Dec	11 - Jan	08 - Feb	11 - Feb	18 - Mar
11 - Dec	12 - Jan	09 - Feb	12 - Feb	19 - Mar
12 - Dec	13 - Jan	10 - Feb	13 - Feb	20 - Mar
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14 - Dec	15 - Jan	12 - Feb	15 - Feb	23 - Mar
15 - Dec	16 - Jan	13 - Feb	16 - Feb	25 - Mar
16 - Dec	17 - Jan	14 - Feb	17 - Feb	27 - Mar
17 - Dec	17 - Jan	14 - Feb	17 - Feb	27 - Mar
18 - Dec	18 - Jan	15 - Feb	17 - Feb	27 - Mar
19 - Dec	19 - Jan	16 - Feb	19 - Feb	30 - Mar
20 - Dec	21 - Jan	18 - Feb	21 - Feb	03 - Apr
21 - Dec	22 - Jan	19 - Feb	21 - Feb	03 - Apr
22 - Dec	23 - Jan	20 - Feb	23 - Feb	04 - Apr
23 - Dec	23 - Jan	20 - Feb	23 - Feb	04 - Apr
24 - Dec	25 - Jan	22 - Feb	25 - Feb	09 - Apr
25 - Dec	25 - Jan	22 - Feb	25 - Feb	09 - Apr
26 - Dec	26 - Jan	23 - Feb	26 - Feb	11 - Apr
27 - Dec	28 - Jan	25 - Feb	28 - Feb	14 - Apr
28 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
29 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
30 - Dec	30 - Jan	27 - Feb	03 - Mar	21 - Apr
31 - Dec	31 - Dec	28 - Feb	04 - Mar	23 - Apr

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	03 - Feb	03 - Mar	11 - Mar	19 - Oct
02 - Jan	04 - Feb	04 - Mar	12 - Mar	19 - Oct
03 - Jan	05 - Feb	05 - Mar	13 - Mar	19 - Oct
04 - Jan	06 - Feb	06 - Mar	15 - Mar	20 - Oct
05 - Jan	07 - Feb	07 - Mar	16 - Mar	21 - Oct
06 - Jan	08 - Feb	08 - Mar	18 - Mar	24 - Oct
07 - Jan	09 - Feb	09 - Mar	19 - Mar	24 - Oct
08 - Jan	11 - Feb	11 - Mar	22 - Mar	27 - Oct
09 - Jan	12 - Feb	12 - Mar	25 - Mar	29 - Oct
10 - Jan	13 - Feb	13 - Mar	27 - Mar	31 - Oct
11 - Jan	14 - Feb	14 - Mar	30 - Mar	03 - Nov
12 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
13 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
14 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
15 - Jan	16 - Feb	16 - Mar	04 - Apr	06 - Nov
16 - Jan	17 - Feb	17 - Mar	07 - Apr	09 - Nov
17 - Jan	18 - Feb	18 - Mar	09 - Apr	10 - Nov
18 - Jan	19 - Feb	19 - Mar	11 - Apr	11 - Nov
19 - Jan	20 - Feb	20 - Mar	14 - Apr	13 - Nov
20 - Jan	22 - Feb	22 - Mar	18 - Apr	16 - Nov
21 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
22 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
23 - Jan	24 - Feb	24 - Mar	23 - Apr	18 - Nov
24 - Jan	25 - Feb	25 - Mar	02 - May	21 - Nov
25 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
26 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
27 - Jan	01 - Mar	29 - Mar	27 - Sep	01 - Dec
28 - Jan	02 - Mar	30 - Mar	30 - Sep	02 - Dec
29 - Jan	03 - Mar	31 - Mar	02 - Oct	03 - Dec
30 - Jan	04 - Mar	01 - Apr	05 - Oct	05 - Dec
31 - Jan	05 - Mar	02 - Apr	09 - Oct	07 - Dec
01 - Feb	06 - Mar	03 - Apr	10 - Oct	07 - Dec
02 - Feb	08 - Mar	05 - Apr	13 - Oct	09 - Dec
03 - Feb	10 - Mar	07 - Apr	19 - Oct	10 - Dec
04 - Feb	11 - Mar	08 - Apr	19 - Oct	10 - Dec
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07 - Feb	15 - Mar	12 - Apr	20 - Oct	11 - Dec
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09 - Feb	18 - Mar	15 - Apr	24 - Oct	12 - Dec
10 - Feb	19 - Mar	16 - Apr	24 - Oct	12 - Dec
11 - Feb	20 - Mar	17 - Apr	25 - Oct	13 - Dec
12 - Feb	22 - Mar	19 - Apr	27 - Oct	15 - Dec
13 - Feb	25 - Mar	22 - Apr	29 - Oct	16 - Dec

2.2 Riverland district

14 - Feb	27 - Mar	24 - Apr	31 - Oct	17 - Dec
15 - Feb	30 - Mar	27 - Apr	03 - Nov	19 - Dec
16 - Feb	31 - Mar	28 - Apr	04 - Nov	20 - Dec
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2.2 Riverland district

06 - Apr	07 - Nov	05 - Dec	22 - Dec	25 - Jan
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2.2 Riverland district

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2.2 Riverland district

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2.2 Riverland district

06 - Sep	27 - Nov	25 - Dec	05 - Jan	08 - Feb
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22 - Sep	29 - Nov	27 - Dec	07 - Jan	11 - Feb
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25 - Sep	30 - Nov	28 - Dec	07 - Jan	11 - Feb
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27 - Sep	01 - Dec	29 - Dec	08 - Jan	12 - Feb
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2.2 Riverland district

27 - Oct	14 - Dec	11 - Jan	19 - Jan	22 - Feb
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16 - Dec	20 - Jan	17 - Feb	23 - Feb	21 - Apr

2.2 Riverland district

17 - Dec	20 - Jan	17 - Feb	23 - Feb	21 - Apr
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25 - Dec	27 - Jan	24 - Feb	02 - Mar	30 - Sep
26 - Dec	29 - Jan	26 - Feb	04 - Mar	05 - Oct
27 - Dec	30 - Jan	27 - Feb	05 - Mar	09 - Oct
28 - Dec	31 - Jan	28 - Feb	06 - Mar	10 - Oct
29 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
30 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
31 - Dec	03 - Feb	03 - Mar	11 - Mar	19 - Oct

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	31 - Jan	28 - Feb	10 - Mar	16 - Oct
02 - Jan	02 - Feb	02 - Mar	12 - Mar	18 - Oct
03 - Jan	03 - Feb	03 - Mar	15 - Mar	20 - Oct
04 - Jan	04 - Feb	04 - Mar	16 - Mar	22 - Oct
05 - Jan	05 - Feb	05 - Mar	17 - Mar	22 - Oct
06 - Jan	06 - Feb	06 - Mar	19 - Mar	24 - Oct
07 - Jan	07 - Feb	07 - Mar	22 - Mar	25 - Oct
08 - Jan	08 - Feb	08 - Mar	24 - Mar	27 - Oct
09 - Jan	09 - Feb	09 - Mar	27 - Mar	28 - Oct
10 - Jan	10 - Feb	10 - Mar	28 - Mar	29 - Oct
11 - Jan	11 - Feb	11 - Mar	02 - Apr	31 - Oct
12 - Jan	12 - Feb	12 - Mar	04 - Apr	01 - Nov
13 - Jan	14 - Feb	14 - Mar	10 - Apr	05 - Nov
14 - Jan	15 - Feb	15 -Mar	16 - Apr	08 - Nov
15 - Jan	16 - Feb	16 - Mar	30 - Aug	13 - Nov
16 - Jan	17 - Feb	17 - Mar	11 - Sep	15 - Nov
17 - Jan	18 - Feb	18 - Mar	15 - Sep	16 - Nov
18 - Jan	19 - Feb	19 - Mar	17 - Sep	17 - Nov
19 - Jan	20 - Feb	20 - Mar	22 - Sep	18 - Nov
20 - Jan	21 - Feb	21 - Mar	25 - Sep	20 - Nov
21 - Jan	23 - Feb	23 - Mar	30 - Sep	22 - Nov
22 - Jan	24 - Feb	24 - Mar	02 - Oct	23 - Nov
23 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
24 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
25 - Jan	28 - Feb	28 - Mar	07 - Oct	25 - Nov
26 - Jan	01 - Mar	29 - Mar	07 - Oct	25 - Nov
27 - Jan	03 - Mar	31 - Mar	09 - Oct	25 - Nov
28 - Jan	04 - Mar	01 – Apr	09 – Oct	25 - Nov
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03 - Feb	12 - Mar	09 - Apr	18 - Oct	02 - Dec
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2.3 MIA

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APPENDIX 3 FORMS

3.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS		
NAME OF GROWER/S		
GROWER NUMBER (if previously registered)		
POSTAL OR BUSINESS ADDRESS		
	POST CODE	
PROPERTY ADDRESS		
	POST CODE	
REAL PROPERTY DESCRIPTION (of area under planting)		

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operational Manual - Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Capsicums	
Citrus	Tomato	Grapes

Appendix 3.2

3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION

APPLICATION FOR PACKER REGISTRATION
AUSTRALIA - NEW ZEALAND
BILATERAL QUARANTINE ARRANGEMENT

NAME OF PACKER	
REGISTERED EXPORT ESTABLISHMENT NUMBER	

PREMISES ADDRESS

DECLARATION

I/We, ... hereby apply for registration as a packer of .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestries, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests, Australia

I have read the arrangement and the Systems Operational Manual Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE	
WITNESS	

CROP GROUPS

Avocados	Capsicums	Citrus
Grapes	Tomatoes	

Appendix 3.3

3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT
EXPORTER REGISTRATION AND INSPECTION APPLICATION

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Version 3 of the Australian - New Zealand Bilateral Quarantine Arrangement and the BQA Systems Operational Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the BQA and the Systems Operational Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for BQA commodities will provide properly identified Inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection
The following persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Appendix 3.3

Treatment Loading Supervision Authority

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the BQA for and on behalf of this Company.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of BQA commodities as is required by the BQA and the contents of this Manual.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the BQA and the Systems Operation Manual Version 3 of May 1999 required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

3.4 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Date	Trade Description	Tick
Commodity	Commodity	
No of Cartons	Registered Grower No.	
Registered Grower No.	Registered Packing Establishment	
	.....	
Ex 28 Number/s:	Australian Origin	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250	
Exporter/s	(Tick one)	
	Exporter Inspection completed by:.....	
	(a) Exporter	
Inspector Name	(b) Exporter delegate (name)	
(Block Letters)	**Inspected by**:	
.....	Grower Line	
Inspector's Signature	Consignment Line	

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NQ**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed **Failed** **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Quarantine Pes

Appendix 3.5

3.5 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	Number of Cartons/Commodity	Temperatures Taken *

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

Appendix 3.5

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

3.6 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKING HOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0C$.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

3.7 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand that should I/we wish to re-enter the Arrangement protocol at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in block letters Signature Date

....

Voluntary Withdrawal

I/we agree that my/our property is no longer required to be registered under the terms and conditions that are required for the New Zealand export trade for BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand that should I/we wish to re-enter the Arrangement at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in Block letters Signature Date

....

AQIS OFFICE DOCUMENTATION
Fax to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or Inspector's Signature

.....

Appendix 3.8

3.8 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection of the following property/premises:- (Grower - Packer) (delete one)

Name .....
Address .....
.....
.....
Reg No .....

I believe that for the following reasons that the above Grower/Company no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) that they have no intention to correct the above mentioned deficiency in the immediate future.

I hereby declare that the above mentioned grower/packer is suspended from the Australia - New Zealand BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Grower Name	Grower's Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

3.9 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY ALL TOMATO CONSIGNMENTS TO BRISBANE, FROM TOWNSVILLE, BUNDABERG OR CAIRNS

DECLARATION OF TREATMENT

I, ... of .....

.....

hereby declare that the ..... number of tomatoes consigned

to .....on .....(date)

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for minimum period of one minute.

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   (iii) Bananas - dipping in a solution of dimethoate with 500 ppm active ingredient for a minimum period of 30 seconds.

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

2. nominate a sample size of 600/950/1250* fruits to be inspected from each lot.
   (*Delete as applicable)

   AND

3. further declare that .....(insert name of supervisor) a designated person nominated by .....(insert name of exporter) has supervised the loading of this consignment for transport to .....
   .....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....19.....

Signature ..... Witness .....

3.10 TOMATO VARIETY DECLARATION

TOMATO VARIETY DECLARATION

PRODUCTION OF TOMATOES FOR EXPORT TO NEW ZEALAND

I, ... registered

New Zealand Grower No.....declare the tomatoes supplied

by me on the ..... to .....

are of the variety .....

Signed ..... Dated .....

Appendix 3.11

3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the BQA Systems Operational Manual Version 3 of May 1999 and have the ability to recognise and identify the pests and weed seeds that are contained in the MPL's for quarantine pests.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the BQA and the Instructions contained in the Operations Manual for Australian New Zealand BQA.

Appendix 3.11

Signature .....
Printed Name ..... Date .....

Approved ..... Senior Inspector/Superving Inspector
Date ..... Seal/Stamp .....

3.12 CONTAINER HYGIENE REPORT

CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF CONTAINERS

Date.....

Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28 Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

Appendix 3.13

3.13 STATUTORY DECLARATION

THE OATHS ACTS - 1867-1960

STATUTORY DECLARATION

State to wit .....

I (Name)..... of address.....
in the State of..... do solemnly and sincerely declare that:

Product (name)..... supplied to (exporter/packinghouse, name and address .....
.....have been grown under the AQIS/MAF protocol procedures for export of such produce to New Zealand.

My registered grower number is ..... and is current and the conditions as required by the BQA for growers have been complied with.

The produce aforementioned was loaded under my supervision on the (date).....
and comprised ..... Bins or ..... Tonnes Bulk and was loaded onto registered truck no. ..... and trailer no.....

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of "The Oaths Acts 1867-1960"

.....Signature .....

A Justice of Peace

3.14 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare that the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

Australia - New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual

amendment 3

Incorporating the New Zealand Import Health Standards for fruit fly host material and the Australian Quarantine and Inspection Service's operational requirements

Australian Quarantine and Inspection Service
Plant Programs Section - Horticulture
Animal and Plant Programs Branch
GPO Box 858 Canberra ACT 2601

New Zealand\Bqasom\NZSOM-amendment3.doc

31 May 1999

SYSTEMS OPERATIONS MANUAL

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT INCORPORATING THE NEW ZEALAND IMPORT HEALTH STANDARDS AND AQIS OPERATIONS REQUIREMENTS

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES ..... **V**

AMENDMENT RECORD ..... **VII**

GLOSSARY OF TERMS ..... **IX**

DEFINITIONS ..... **X**

INTRODUCTION **1**

SECTION 1. BACKGROUND **1**

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements ***1***

1.2 Scope of the Manual ***2***

SECTION 2. PEST CATEGORIES **1**

2.1 Pest Category Classifications ***1***

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS 1

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS 1

2.1.3 International Phytosanitary Certificate (IPC) Pests - Risk Group 1 - PESTS 2

2.2 Maximum Pest Levels ***2***

2.3 Contaminants ***3***

SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS **1**

3.1 Country Freedom From Fruit Flies ***1***

3.2 Area Freedom Districts within Australia ***1***

3.2.1 Riverina - MIA 2

3.2.2 Sunraysia - Victoria and New South Wales 3

3.2.3 Riverland - South Australia 3

3.2.4 Commodity Registration Requirements 3

3.2.5 Commodity Security - Area Freedom 5

3.2.6 Phytosanitary Certification Endorsements - Area Freedom Treatments 5

3.3 Methyl Bromide Fumigation ***7***

3.3.1 Fumigation Responsibilities 7

3.3.2 Phytosanitary Certificate Endorsements 10

3.4. Dimethoate Dip/Spray ***11***

3.4.1 Post Treatment Security - Chemical Dipping/Spraying 14

3.4.2 Post Treatment - Transportation of Product to Export Loading Point 14

3.4.3 Phytosanitary Certificate Endorsements 15

3.5 Cold Storage ***16***

3.5.1 Approved Cold Storage Disinfestation Treatments 17

3.5.2 Registration 17

3.5.3 Cold Disinfestation Procedures 17

3.5.4 Temperature Recording 18

3.5.5 Record Requirements 18

3.5.6 Auditing Requirements – Cold Storage Disinfestation Centres 19

3.5.7 Phytosanitary Certificate Endorsements 20

3.6 Non Host Status ***21***

3.6.1 Phytosanitary Certificate Endorsement 21

3.7 Heat Treatments ***21***

3.8 Dimethoate Dipping - Approved Cucurbits *22*
3.8.1 Dimethoate Treatment Centre Requirements 24
3.8.2 Phytosanitary Certificate Endorsements 24
3.9 Methyl Bromide Fumigation - Approved Products *24*
3.9.1 Phytosanitary Certificate Endorsement 25
3.10 Winter Window – Field Control Systems Approach *25*
3.10.1 Grower Responsibilities 26
3.10.2 Packinghouse Responsibilities 27
3.10.3 Inspection of Produce 27
3.10.4 Transporting and Loading into Export Containers 27
3.10.5 Phytosanitary Certification 28
Attachment 1 to Section 3 – Summary of requirements for access of fruit fly host commodities into New Zealand from Australia *30*
SECTION 4. MANAGEMENT RESPONSIBILITIES **1**
4.1 AQIS Canberra Office *1*
4.2 State Departments of Agriculture (or equivalents) *2*
4.3 AQIS State Offices *2*
4.3.1 Registration Requirements 3
4.3.2. Sampling Requirements 4
4.3.2.1 Consignment Line Samples 4
4.3.2.2 Grower Line Samples 4
4.3.3 AQIS Inspection Procedures 5
4.3.4 Rejection Procedures 5
4.3.5 Split Consignment Inspections 6
4.4 Untreated Produce Being Forwarded from Country Areas *7*
4.5 AQIS Auditing Requirements *7*
4.5.1 AQIS BQA/IHS Audit Requirements 7
4.5.1.1 Grower/Audit Frequency: 7
4.5.1.2 Grower Audits - Certification Assurance Systems 8
4.5.1.3 Audit Requirements/Growers - Suspension Criteria 8
4.5.1.4 Grower Audits - Non Compliance 9
4.6 Audit Requirements/Crop Monitors *10*
4.6.1 Crop Monitor Audits/Non Compliance 10
4.7 Audit Requirements/Packinghouses *10*
4.7.1 Packinghouse Audits/Non Compliance 11
4.8 Audit Requirements - Treatment Centres *12*
4.8.1 Treatment Centre Audits/Non Compliance 13
4.9 Audit Requirements - Exporters *13*
4.9.1 Exporter Delegate Audits 13
4.9.2 Exporter/Exporter Delegate - Non Compliance 13
4.9.3 Audits after Product Rejections by AQIS 14
Attachment 1 to Section 4 – AQIS Plant Contact List *16*
SECTION 5. GROWER RESPONSIBILITIES **1**
5.1 Registration *1*
5.2 Responsibilities *1*
5.3 Grower Audits *2*
5.3.1 Grower Suspensions 2
5.3.2 Grower Audits - Non Compliance 3
5.3.3 Audit Requirements/Crop Monitors 4
5.3.4 Crop Monitor Audits/Non Compliance 4
SECTION 6. PACKINGHOUSE RESPONSIBILITIES **1**
6.1 Grower Registration - Commodity Specific *1*
6.2 Packinghouse Responsibilities - Commodity Specific *2*
6.3 Inspection Requirements *3*
6.3.1 Documentation 3
6.4 Security and Supervision Responsibilities *3*
6.5 Packinghouse Audits *3*
6.5.1 Application for Registration 4
6.5.2 Continued Registration 4
6.6 Suspension of Packinghouse Registration *4*

SECTION 7. CERTIFICATION ASSURANCE ARRANGEMENTS - PACKINGHOUSE RESPONSIBILITIES **1**
7.1 General Requirements *1*
7.1.1 Auditing for New Zealand Requirements 1
7.1.2 CA - New Zealand Inspection Requirements 2
7.2 Documentation *3*

7.3 Post treatment Security *3*
SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES 1
8.1 Registration *1*
8.2 Process Controls *1*
8.3 BQA Treatments - AQIS Supervision *1*
8.3.1 Fumigation Centres 1
8.3.2 Cold Storage Centres 2
8.3.3 Dimethoate Treatments 2
8.3.3.1 Waxed produce 2
8.3.3.2 AQIS requirements 2
8.4 AQIS Audits of Treatment Centres *3*
SECTION 9. EXPORTER RESPONSIBILITIES **1**
9.1 Registration Requirements *1*
9.2 Exporter Responsibilities *1*
9.3 Exporter Inspection *1*
9.4 Split Consignment Inspections *2*
9.5 Untreated Produce being forwarded from Country Areas *3*
9.6 Delegation of Inspection *3*
9.7 Documentation *3*
9.8 Procedures for Exporter Rejected Produce *4*
9.9 Post treatment Security *4*
9.10 Security of Produce - Exporter/Freight Forwarder Premises *4*
9.11 Audits - Exporters *5*
9.12 Audits -Exporter's Delegate *5*
9.13 Exporter/Exporter Delegate - Non Compliance *5*
SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES **1**
10.1 Fruit Fly Area Freedom - Management Requirements *1*
10.1.1 Area Freedom - Fruit Flies 1
10.1.2 Validation of Area Freedom 1
10.1.3 Outbreak 1
10.2 Trapping *2*
SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS **1**
11.1 Redback Spiders - Lactrodectus hasselti *1*

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES **1**

AVOCADO **1**
BANANA **7**
CAPSICUM **11**
CITRUS **18**
CUCUMBER **25**
GRAPE **34**
MANGO **39**
MELON **42**
PAPAYA **51**
PINEAPPLE **54**
POMEGRANATE **59**
STRAWBERRY **62**
TOMATO **66**
WATERMELON **73**
ZUCCHINI & SCALLOPINI **81**

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY **1**

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT **1**
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT **9**
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA **16**

APPENDIX 3 FORMS **1**

3.1 APPLICATION FOR GROWER REGISTRATION **1**

3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION 2
3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION 3
3.4 INSPECTION RECORD 5
3.5 FUMIGATION RECORD 6
3.6 COLD DISINFESTATION RECORD 8
3.7 WITHDRAWAL NOTICE 9
3.8 SUSPENSION NOTICE 10
3.9 DECLARATION OF DIMETHOATE TREATMENT 11
3.10 TOMATO VARIETY DECLARATION 12
3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 13
3.12 CONTAINER HYGIENE REPORT 15
3.13 STATUTORY DECLARATION 16
3.14 AVOCADO GROWER DECLARATION 17
3.15 CUCURBIT GROWER DECLARATION 18

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Holders	Address	Copy Number
Manager Plant Programs Animal and Plant Programs Branch Attn. [redacted]	Canberra Office	1
Manager Horticulture Exports Animal and Plant Programs Branch Attn [redacted]	Canberra Office	2
New Zealand Contact Officer Plant Programs Section Animal and Plant Programs Section Attn [redacted]	Canberra Office	3
AQIS Brisbane Office Senior Inspector Exports Attn [redacted]	Locked Mail Bag 1700 Spring Hill Queensland 4004	4
AQIS Brisbane Office State Contact Officer (C/A) Attn [redacted]	Locked Mail Bag 1700 Spring Hill Queensland 4004	5
AQIS Sydney Office Senior Export Inspector Attn [redacted]	Export/Import Branch PO Box 657 Mascot 2020	6
AQIS Sydney Office State Contact Officer (C/A) Attn [redacted]	Export/Import Branch PO Box 657 Mascot 2020 NSW	7
AQIS Melbourne Office Senior Export Inspector Attn [redacted]	PO Box 60 World Trade Centre Melbourne 3005	8
AQIS Melbourne Office State Contact Officer (C/A) Attn [redacted]	PO Box 60 World Trade Centre Melbourne 3005	9
AQIS Adelaide Office Senior Export Inspector Attn [redacted]	PO Box 63 Port Adelaide 5015	10
AQIS Adelaide Office State Contact Officer (C/A) Attn [redacted]	PO Box 63 Port Adelaide 5015	11
Dept of Agriculture W. Aust	PO Box 1410	12

Senior Export Officer Attn [redacted]	Canning Vale 6155	
Dept of Agriculture W.Aust State Contact Officer Attn [redacted]	PO Box 1410 Canning Vale 6155	13
Dept of Agriculture N.T. Attn [redacted]	PO Box 2268 Darwin 0801	14
Dept of Agriculture Tasmania Attn [redacted]	Macquarie Wharf No 1 Hobart 7000	15
Dept of Agriculture Tasmania State Contact Officer Attn [redacted]	Macquarie wharf No. 1 Hobart 7000	16
Ministry of Agriculture and Forestry Import Compliance Officer Attn [redacted]	PO Box 2526 Wellington New Zealand	17
[redacted] Plant Quarantine Policy Branch	AQIS Canberra Office	18
AQIS Mildura Office Attn [redacted]	PO Box 2756 Mildura 3500 Vic	19
AQIS Griffith Office Attn [redacted]	104 - 110 Banna Avenue Griffith NSW 2680	20
AQIS Bundaberg Office Attn [redacted]	PO Box 815 Bundaberg 4670	21
AQIS Nth Queensland Office Attn [redacted]	PO Box 96 Cairns 4870	22
AQIS Townsville Office Attn [redacted]	PO Box 1085 Townsville 4810	23
AQIS Riverland Office Attn [redacted]	PO Box 411 Loxton SA 5333	24
Victorian Department of Agriculture Attn [redacted]	Private Mail Bag 15 South Eastern Mail Centre 3176	25
New South Wales Agriculture Attn [redacted]	Locked Bag 21 Orange NSW	26
Primary Industries South Australia Attn [redacted]	GPO Box 1671 Adelaide	27
Queensland Department of Primary Industries Attn [redacted]	GPO Box 46 Brisbane QLD 4001	28

AQIS Mackay Office Attention [redacted]	PO Box 1517 Mackay QLD 4740	29
AQIS Townsville Office Attention [redacted]	PO Box 1085 Townsville 4810	30
AQIS Shepparton Office Attention [redacted]	PO Box 6251 Shepparton 3630	31

AQIS State Offices and State Departments of Agriculture will make up additional 'Official Distribution Lists' for their own requirements which may include industry bodies, exporters and packinghouse/growers. AQIS Offices and State Departments of Agriculture must implement procedures to record distribution lists and for the issue of controlled copies of this Manual and for amendments to this manual to those nominated on distribution lists.

AMENDMENT RECORD

Amendments to this Manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	[redacted]	18 June 1999
2		14 July 1999
3		27 April 2000
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GLOSSARY OF TERMS

AFFA	Agriculture, Fisheries and Forests of Australia
ANVAS	Avocado Nursery Voluntary Accreditation Scheme
APPB	Animal and Plant Programs Branch (AQIS Canberra)
AQIS	Australian Quarantine and Inspection Service
BQA	Bilateral Quarantine Arrangement
CA	Certification Assurance
EC (FF+V) O's	Export Control (Fresh Fruit and Vegetable) Orders
EDB	Ethylene Dibromide
IHS	Import Health Standards (New Zealand)
ISO	International Standards Organisation
MAF	Ministry of Agriculture and Forestry (New Zealand)
MAP	Maximum Allowable Prevalence
MB	Methyl Bromide
QC	Quality Control
SBV	Sun Blotch Viroid (Avocado)
SI(E)	Senior Inspector (Exports)

DEFINITIONS

AQIS Inspection Lots	An inspection lot is any number of packages from one packer/exporter of the same BQA commodity presented for inspection at one time. Lines are rejected/accepted for export based on this inspection. This includes lines presented for inspection that will be subsequently split into separate consignments for export to several destinations in New Zealand.
Commodity	All species/varieties of produce which come under the one genus of plants and are treated by the same disinfestation treatment, are to be considered as one commodity. (i.e. rockmelons and zucchini are one commodity under the cucurbit group of plants - mandarins and lemons are one commodity under citrus).
Defect	Any unit of produce that is infested with critical and/or quarantine pests.
End Point Inspection	Product inspection carried out on an individual grower line basis following disinfestation treatments being undertaken. Lines are rejected/accepted for AQIS inspection based on the results.
Grower Line Consignments	A consignment consisting of only one BQA crop and from one grower.
Homogeneous	An identifiable lot of produce which has been produced in accordance with the directions in this Manual resulting in uniformity of treatment.
In - Line Inspection	A process where a packinghouse under AQIS Approved Certification Assurance (CA) Arrangements, has defined a sampling and inspection method, that meets the appropriate sampling plan required in this Manual, over a period of time during the packing process.
Interim Approval	Approval for a disinfestation treatment system which has been accepted in principal by MAF but not ratified as an approved treatment system pending additional research being concluded and accepted by MAF. Any commodity which has an "interim approved" arrangement, will if live fruit fly is found during on-arrival inspection in New Zealand, be suspended from export to New Zealand immediately.
Line	A group of produce that is homogeneous.
Mixed Line Consignments	A consignment, covered by a single phytosanitary certificate for one commodity but from more than one grower.

Monitoring	The actions undertaken to detect the presence of fruit fly or other Risk Group 2 pest/contaminant in the orchard area and/or to meet New Zealand's fruit fly area freedom specifications.
Pathway	A documented series of activities that, when carried out according to approved procedures, form a discrete and traceable system, from the grower to export loading point.
Phytosanitary Certificate	The certificate signed by an AQIS Inspector in accordance with the International Plant Protection Convention verifying that produce has been produced in accordance with the Australia - New Zealand BQA and the directions of this Manual and appropriately endorsed.
Risk Group 3 Pest	Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic effects on their production and/or environment (some importing countries prohibit the entryof the host commodity). An offical surveillance system is required for such pests in New Zealand.
Risk Group 2 Pest	Risk Group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.
Risk Group 1 Pest	Risk Group 1 pests are those regulated pests which on introduction into New Zealand could cause unaceptable economic impacts on the production of a commodity/commodities and/or the environment.
Secure Package	Any approved method that will minimise the risk of cross contamination, re-infestation or substitution of produce destined for New Zealand after it has been inspected and/or treated, to ensure it meets the New Zealand entry requirements.
Trade Samples	Are fruits which are being forwarded for market appraisal, packaging methods or other types of research work being investigated on a commercial scale by importers/exporters involved directly in the Australia - New Zealand trade.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a cluster).

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INTRODUCTION

SECTION 1. BACKGROUND

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements

The BQA is a formal agreement between the Australian Quarantine and Inspection Service (AQIS) and the New Zealand Ministry of Agriculture and Forestries (MAF), to ensure New Zealand's pre-export requirements are documented. This Manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The previous BQA had 15 appendices which related to each commodity being exported. For example Appendix 2 related to pome fruits and included responsibilities that must be followed by AQIS before certifying apples or pears for export to New Zealand.

AQIS/MAF have amended the BQA to include a series of appendices that describe the requirements for a particular treatment for fruit fly host material. This new BQA structure incorporates recent developments in relation to the documentation of New Zealand import health standards (IHS) on a commodity by commodity basis.

The major change which occurs between the "old" and the "new" import systems is that under the "old" BQA, MAF imposed a tolerance of 5 live eggs/larvae of fruit flies in one million units of produce. To meet that fruit fly tolerance, operational systems had to include additional grower and packer responsibilities to ensure that a very low level of infested material would be presented to AQIS for export inspection. With the incorporation of the new IHS and BQA systems, New Zealand have reviewed the tolerance levels for fruit flies and now consider disinfestation treatments that provide 32 insect survivors in one million treated insects (Probit 9 treatments) to be adequate security for their import Standards.

All approved fruit fly disinfestation treatments, as listed in this Manual, meet the required New Zealand disinfestation standards. Any new disinfestation treatments that industry may require to be investigated (particularly heat treatments), will need to meet the efficacy requirements of the New Zealand IHS systems.

The resultant change in emphasis by MAF means that the previous stringent grower and packer requirements are no longer mandatory for all treatment pathways* where an approved disinfestation treatment is applied. However, packinghouses who have some responsibilities delegated to them through treatments and exporter inspection arrangements, will still have responsibilities to fulfil to ensure New Zealand quarantine requirements are met. There will be much more emphasis placed on treatment centres, treatment centre operators, post treatment security and exporter requirements than was previously required.

*NOTE: growers of some commodities will still be required to undertake specific responsibilities where there are pests which are categorised as Quarantine Risk Group 2 and need field control programs as a treatment management option for this category of pest. For further information see Grower Responsibilities in Section 5 of this Manual.

Specific Changes to the BQA

Under the new BQA/IHS framework, AQIS/MAF have changed the emphasis of the appendices from commodities to treatment pathways. This means that for many commodities there are no longer mandatory requirements to document and undertake pre-treatment activities.

Procedures which may no longer be compulsory under the new BQA/IHS framework include;

. grower registration - (monitoring and spray diaries - unless specific controls are required for defined Quarantine Risk Group 2 pests).
. packer registration - (unless packer is packing defined Quarantine Risk Group 2 pest commodities, or is undertaking approved treatments of produce, or inspecting produce under exporter delegation).

NOTE: grower and/or packer registration may still be required where traceback to the "treatment" includes pest free production areas or non-host status treatment with special requirements (e.g. designated non-host status by variety).

The new BQA/IHS and the requirements of this Manual concentrate on the documented responsibilities of treatment of produce through to the export of the commodities, including security of the system once treatment has been undertaken and inspection procedures which must be undertaken to ensure accurate phytosanitary certification and consignment homogeneity.

For some fruit fly host commodities it will only be necessary to have an auditable system from the treatment operator and/or treatment facility, including post-treatment security procedures until the product is loaded for export shipping, which will safeguard against possible product reinfestation or substitution.

However, for other commodities where Quarantine Risk Group 2 (RG2) pests are associated with the commodity being packed, an auditable system must be in place from grower through to export loading—as was the case under the "old" BQA systems.

1.2 Scope of the Manual

This Operational Manual is designed to ensure;

. only approved fruit fly host commodities are exported to New Zealand,
. homogeneity of fruit fly host produce consignments,
. approved treatments for fruit fly host produce are used,
. required levels and intensity of inspection of fruit fly host produce are maintained,
. security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce,
. records traceback to grower/packer/treatment centre (as appropriate),
. accurate phytosanitary certification is made in accordance with New Zealand requirements.

NOTE: all systems will be subject to random audits by the Canberra Office and all systems may be audited by New Zealand MAF at frequent intervals. The purpose of such audits will be to establish that the terms and conditions of the BQA/IHS are being met via the procedures agreed to and documented in this Manual, and will include measurement of pathway compliance from growers (where required) through to final export container loading and all associated documentation.

It is recommended that AQIS State Offices and State Departments of Agriculture (or equivalents), should also conduct management audits of the systems to ensure the State responsibilities are being adequately performed and recorded.

This Manual gives instructions for audit procedures and maintenance of records that will be the responsibility of AQIS State Offices, and where applicable State Departments of Agriculture or their equivalents (where these States still retain independent export inspection regimes), to implement and to take required corrective actions when non-conformities are identified.

The commodities and approved treatments that apply to fruit fly host produce are as follows;

	Commodity	Treatments	Special Conditions
.	Tomatoes	Dimethoate	Grower Registration
		Area Freedom	Nil
.	Cucurbits	Dimethoate - Approved treatment	Nil
		Dimethoate & in-field controls	Grower Registration
		Fumigation & in-field controls	Grower Registration
		Area Freedom	Nil
		Winter window	Grower Registration
.	Capsicum	Dimethoate	Nil
		Area Freedom	Nil
.	Grapes	Cold Storage	Nil
		Area Freedom	Nil
.	Pineapple	Non-Host status	Nil
.	Strawberry	Fumigation	Nil
		Area Freedom	Nil
.	Avocado	Cold Storage	Grower Registration
		Area Freedom	Grower Registration
.	Citrus	Cold Storage	QLD - Grower Reg.
		Area Freedom	QLD - Grower Reg.

NOTE: all cartons of produce intended for export to New Zealand, whether grower registration is required or not, must be marked with some form of grower and packinghouse identification so that traceback can be undertaken to grower's properties.

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SECTION 2. PEST CATEGORIES

MAF have made some alterations to the previous pest lists that have been used in conjunction with BQA products. Some of these changes include amendments to pest classifications or categories. Industry and AQIS inspection staff should compare the new and old pest lists for each commodity (listed at Appendix 1 to this Manual) to become familiar with the new listings. Pest Lists are commodity specific and include reference to pests which are regarded as non-quarantine pests to enable additional direction to be given to inspection requirements.

Note: during any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Any pest detected which is not presently included in the Pest Lists **must** be reported to the Canberra Office immediately so that advice and categorisation can be made in conjunction with MAF New Zealand. The consignment must be held until a categorisation of the pest is made.

2.1 Pest Category Classifications

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS

Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which upon entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or would have significant economic effects on their production and/or environment (some importing countries prohibit the entry of the host commodity). An offical surveillance system is required for such pests in New Zealand.

Hosts of Risk Group 3 pests require approved disinfestation treatments to be undertaken in Australia and the establishment of operational systems which document the procedures which will be undertaken to ensure AQIS phytosanitary certification is meaningful and auditable by MAF.

The action taken by MAF should Risk Group 3 pests be detected on arrival in New Zealand will be to reship or destroy the offending consignment and to immediately suspend the export treatment pathway. For example, if an offending consignment is associated with dimethoate treatment, all dimethoate treatments would be suspended (not just the offending commodity), until an AQIS audit/investigation was completed and the results accepted by New Zealand.

The same rule applies to area freedom or non-host status treatment pathways.

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS

Risk Group 2 pests are those regulated pests which upon introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.

These pests/contaminants will require an Additional Declaration for Risk Group 2 pests on the phytosanitary certificate. The Additional Declaration will certify that some form of management

practice (eg. a pest control program in the field), has been carried out to ensure the consignment is free from the pest/contaminant of concern.

The action taken by MAF on interception of live Risk Group 2 pests will be to reship or destroy the offending consignment and immediately advise AQIS of the non-conformance. In some instances the consignment may be ordered for treatment (if an effective treatment is available). There will be no suspension of trade invoked for Risk Group 2 pests although AQIS will usually conduct a follow up audit to determine the cause of the system failure and to implement corrective action where possible.

Please see the individual commodity pest lists at Appendix 1 to this Manual for details of those commodities for which additional declarations are required for Risk Group 2 pests/diseases.

2.1.3 International Phytosanitary Certificate (IPC) Pests - Risk Group 1 - PESTS

Risk Group 1 pests are those regulated pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

The action taken by MAF on interception of live Risk Group 1 pests will be to allow the consignment to be treated if an approved treatment is available, or alternatively, the consignment will be reshipped or destroyed.

Should Risk Group 1 pests be detected during exporter/exporter delegate inspections, the consignment must be rejected and subject to corrective action before being presented for AQIS inspection.

In accordance with International Plant Protection Convention (IPPC) rules for the issuance of phytosanitary certificates, should any live Risk Group 1 pests be detected during AQIS inspection the consignment must be rejected and subject to corrective action (reprocessing, withdrawal of offending grower etc.), before being resubmitted for further inspection and certification.

2.2 Maximum Pest Levels

The inspection tolerances in Table 1 below ensure a 95% confidence that the given Maximum Allowable Pests (MAP) will not be exceeded for any category.

A selected sample size must be nominated by the exporter or exporter delegate prior to any inspection being undertaken. Once a sample number has been selected it cannot be varied and must then be used for all inspections covering that line/consignment. That is, the AQIS and MAF on-arrival inspections will all be conducted at the nominated sample size rate.

TABLE 1
INSPECTION TOLERANCE TABLE
SAMPLE SIZES - PEST TOLERANCE LEVELS

Lot size	Sample size	Acceptance level Risk group 1 pests	Acceptance level Risk group 2 pests	Acceptance level Risk group 3 pests
≤ 1,000	450	0	0	0
1,001 – 2,000	520	0	0	0
2,001 – 3,000	550	0	0	0
3,001 – 4,000	560	0	0	0
4,001 – 5,000	570	0	0	0
> 5,000	600	0	0	0
> 1,000	950	< 2 units	0	0
> 1,250	1250	< 3 units	0	0

Pests listed as Non-regulated (non-quarantine) pests at Appendix 1 of this Manual have an unlimited tolerance during inspection. These pests are regarded as non-quarantine pests between Australia and New Zealand.

Note: during any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF. The offending consignment must be held until a categorisation is made.

2.3 Contaminants

Consignments contaminated with soil, or other potential carriers of regulated pests (eg. leaf litter) will not be permitted entry if the level of contamination is above the acceptable tolerance level. MAF Biosecurity Authority (Plants) Standard 152.02 – section 7.4 gives the following tolerances for soil and foliage contamination upon inspection of lots in New Zealand:

- Lots contaminated with soil in excess of 25g per 600 units sampled shall either be washed free of soil prior to release, reshipped or destroyed at the importer's option and expense.

- Lots contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped or destroyed at the importer's option and expense.

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SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS

3.1 Country Freedom From Fruit Flies

PEST FREE AREAS (BASED ON NASS STANDARD 158.03.07) ARE KNOWN AS APPENDIX 1 TO THE BQA/IHS

Appendix 1 to the BQA/IHS refers to fruit flies that are considered to be exotic to Australia and which are not established here. e.g. *Bactrocera cucurbitae* (melon fly).

Through the Australian surveillance and monitoring program, managed by the National Plant Protection Office within AFFA (and consisting of exotic fruit fly trapping and monitoring regimes which are conducted at all international air and sea ports), Australia can claim and New Zealand will accept whole of Australia freedom from exotic fruit flies.

The air and sea ports that are included in the trapping and monitoring regimes are listed below;

Northern Territory

Darwin	Gove	Groote

Queensland

Brisbane	Bundaberg	Cairns
Gladstone	Karumba	Mackay
Mourilyan Harbour	Thursday Island	Townsville
Weipa		

New South Wales

Coffs Harbour	Newcastle	Sydney
Wollongong	Yamba	

Victoria

Geelong	Melbourne/Westerport	Portland

South Australia

Adelaide	Ceduna	Port Augusta
Port Lincoln	Port Pirie	Whyalla

Western Australia

Albany	Broome	Bunbury
Carnarvon	Dampier	Derby
Esperance	Geraldton	Karratha
Perth/Freemantle	Port Hedland	Wyndham

Tasmania

Devonport/Burnie	Hobart	Launceston

3.2 Area Freedom Districts within Australia

PEST FREE AREAS (BASED ON NASS STANDARD 158. 03. 06) ARE KNOWN AS APPENDIX 2 TO THE BQA/IHS

The fruit flies that are referred to at Appendix 2 to the BQA are those fruit flies which are endemic to Australia, but for which various districts have through trapping and monitoring programs, been able to establish area freedom from those flies. eg *Bactrocera tryoni*.

Area freedom from fruit flies is considered as an approved treatment for those areas where approved trapping regimes are in place in accordance with the minimum Standards covered by the Australian Code of Practice for the Management and Control of Queensland Fruit Fly and where equivalent permanent trapping regimes are in place for Mediterranean fruit fly and Oriental species of fruit fly as stipulated in the New Zealand NASS Standard 158.03.06 and NASS Standard 158.03.07.

NOTE: should a fruit fly of any species (either alive or dead) be found during AQIS or Exporter inspections in Australia, AQIS will inform the State Department of Agriculture responsible for the Region supplying that fruit of the detection, and will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.

Should a fruit fly of any species (either alive or dead) be found during New Zealand MAF on-arrival inspections, it will mean the suspension of all area freedom certification from all districts of Australia until an AQIS audit can be undertaken to determine the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on the results of the AQIS audit.

MAF have approved (under specific management criteria - New Zealand NASS Standard 158.03.06) a 15km radius suspension zone for a period of one generation plus 28 days (from when the last fly was caught) to be implemented around fruit fly outbreak sites in the Riverland (including the Riverland extension area and Mypolonga), Sunraysia, and Riverina. A fruit fly outbreak will occur where either 2 male flies are detected within 400 metres within 14 days, 1 female fly is detected, or one or more larvae are detected.

Should, as a result of detection surveys, there be a situation where 2 outbreak sites are found between 1 - 3 kms apart, a 30 kms outbreak zone will be applied from a mid-distance between the outbreak sites. Where detections reveal two outbreak sites in excess of 3 kms apart, two 15 kms radii circles will be applied to each outbreak site.

NOTE: should a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

State Departments of Agriculture (or their equivalents) must report all fruit fly finds (including single fly detections) in the fruit fly area freedom zones to AQIS Canberra Office within 2 days of detection and identification. This information shall be passed onto MAF New Zealand at the earliest opportunity thereafter.

The following districts are recognised as being area free of all species of fruit fly as determined by trapping surveys and monitoring data forwarded by AQIS to MAF, and accepted by MAF as meeting their requirements under NASS Standards 158.03.06.

3.2.1 Riverina - MIA

This area covers the horticulture growing districts along the Murrumbidgee River (as well as the township of Hillston on the Lachlan River), and includes (but is not excluded to) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrandera and Darlington Point and the towns which are located between the above nominated towns.

Area (b) is the Hillston District.

Area (c) is the Menindee District.

3.2.2 Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and other areas around and between these towns.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and other areas between these towns.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and other areas between these towns.

3.2.3 Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri, Barmera, Waikerie and other areas between these towns.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, and includes the towns in between and the Shire of Mildura.

Area (i) the Mypolonga township surrounds.

NOTE: in the event that “Area Freedom” is suspended within any of the above defined regions at any time, packinghouses who intend to pack both “area free fruits” and “suspension zone fruits” must develop written procedures to show how fruits from each area will be identified, segregated, processed, stored and documented. Fruits from “area free zones” and those needing physical or chemical treatments must be shipped as separate consignments and cannot be co-joined.

3.2.4 Commodity Registration Requirements

Where a treatment is based on sourcing host material from a pest free area, the consignment must be directly traceable to that area. AQIS requires that grower numbers must form part of the trade description requirements and will form an additional traceback mechanism should such be required.

Where a treatment is a post harvest disinfestation treatment, the consignment must be traceable to the approved treatment facility and the unique treatment batch. AQIS however requires that grower numbers are part of the trade description requirements, and these numbers will form additional traceback mechanisms should such be required.

Whilst grower registration may not be mandatory, all packinghouses must provide a list of grower's names, addresses and allocated grower numbers for all produce that is being packed for the New Zealand market.

Note: in the event that fruit fly outbreak suspension zones are implemented within fruit fly area freedom districts, packinghouses must provide a list of growers who are in the declared quarantine suspension zone, and a list of growers who remain in the area freedom districts surrounding a suspension zone.

TABLE 2
APPENDIX 2 TO THE BQA/IHS
AREA FREEDOM FROM FRUIT FLIES
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Citrus	Yes - QLD	Yes - QLD	Yes	"	Yes
Avocado	Yes	Yes	Yes	"	Yes
All other commodities	Not required	Not required	Not required	"	Yes

Regardless of grower/packinghouse registration requirements, each package of produce destined for New Zealand will contain the grower number or equivalent recognised code, packinghouse number and exporters name and address.

Tablegrapes are subject to mandatory treatment for redback spiders. For fumigation specifications, see Section 11 of this Manual, and for information regarding fumigator's responsibilities see Section 3 of this Manual.

Avocado growers must register due to Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV), and citrus growers for citrus leaf miner which is categorised as a Quarantine Risk Group 2 pest for New Zealand.

Citrus growers in Queensland must be registered for field treatment requirements for the control of *Guignardia citricarpa* - citrus black spot. Field treatments, as recommended for the Australian - Japanese citrus program are acceptable, and grower records must be kept for all controls that are being implemented. As citrus black spot is being surveyed for in other States, no grower monitoring or control programs need to be undertaken. **An additional declaration for this pest/disease must be made for all citrus consignments.**

Growers of other commodities under area freedom certification will not need to be formally registered for the New Zealand BQA.

3.2.5 Commodity Security - Area Freedom

All product being moved from an area freedom from fruit flies district, which is to be loaded for export outside that district, must be fully secured at all times.

Approved security measures for transporting of produce will include either;

. fully shrinkwrapping each pallet of produce (including the surface area between the bottom row of cartons and the actual pallet),
. fully enclosing each pallet with shademesh cloth with a maximum aperture of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),
. loading direct into panotech vans with units sealed by AQIS officers.

All consignments shipped out of Area Freedom Districts will be covered by either an AQIS EX 186 Transfer Certificate or EX 28 Notice of Intention to Export Certificate issued by the despatching AQIS office. Each consignment must be inspected on arrival in the receiving district by AQIS officers in that region to verify the security of the consignment/s.

Should inspecting officers find that the security of the consignment/s have been breached during transporting, the consignments must be rejected for area freedom certification. However, the rejected produce may be allowed disinfestation treatments, as directed in this Manual, as corrective action should the exporter choose this option.

3.2.6 Phytosanitary Certification Endorsements - Area Freedom Treatments

General Endorsement - 1

"The produce in this consignment has been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General Endorsement - 2

"The produce in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific Endorsements - Avocado

“The fruit in this consignment has been sourced from growers and blocks registered with the ANVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)”.

Specific Endorsement - Tablegrapes

“The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti* (Australian redback spider)”.

Specific Endorsement - Citrus Fruits

“The citrus in this consignment has undergone a disease control program that ensures freedom from *Guignardia citricarpa* - Citrus black spot”.

3.3 Methyl Bromide Fumigation

METHYL BROMIDE FUMIGATION IS KNOWN AS APPENDIX 3 TO THE BQA/IHS AND APPLIES ONLY TO STRAWBERRIES.

Methyl bromide fumigation is an **approved treatment for strawberry fruits**. All fumigations must be performed by licensed fumigators, and within AQIS/State Department approved treatment centres.

All fumigations must be undertaken in accordance with AQIS Fumigation Standards.

For the purposes of this Manual, **watermelon** fumigation requirements are listed in this Section of the Manual.

All exports of **watermelon** must be referred to in export documentation as **Appendix 9 to the BQA** and additional responsibilities and requirements are located at Section 3.9 of this Manual.

Fumigation treatment requirements are as detailed in Table 4 below;

TABLE 4
METHYL BROMIDE FUMIGATION
TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21.0 - 26°C and above	32g/m3	Watermelon - 4 hours
15°C and above	48g/m3	Strawberry - 3 hours

All fumigations must be performed with the amount of product space equal to less than 50% of total air space within the chamber or tent.

NOTE: should live fruit fly be found during AQIS or Exporter inspections following treatment, the fumigation centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the methyl bromide treatment pathway will be suspended immediately for all Australian products until an AQIS audit can be undertaken to determine the reasons for such failure, and MAF accept these findings.

3.3.1 Fumigation Responsibilities

All fumigation treatment centres that are to be involved in the New Zealand BQA/IHS trade must be registered with AQIS for this purpose.

In addition to the normal AQIS registration requirements pertaining to fumigation centres, the following additional requirements must be in place before registration for the New Zealand program is permitted.

All BQA/IHS produce required to be fumigated must be managed in accordance with the following process controls. Fumigation treatment centres must be able to demonstrate at all times that the following requirements are being met;

1. Incoming product identification.
2. Segregation from other produce and clearly marked "New Zealand"
3. The treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment. ie Treatment batch numbers relating to incoming consignments or equivalent recording systems will be required.
4. Documented treatment records
5. How measuring equipment is calibrated, and how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.
9. If required, maintenance of inspection facilities on the premises.

In accordance with the above requirements, fumigation treatment facilities must develop a set of procedures that clearly define the responsibilities and work duties of all staff involved in the fumigation of watermelons or strawberries.

It is recommended that fumigation establishments write procedures for each of the above requirements, detailing who is responsible for the activity (it can be more than one person as long as all persons know their duties in each category), when the activity is done, what records are made and where these records will be filed.

With regard to Item 3 above, it is recommended that individual procedures accompanied by work instructions be written to define the processes and controls on the processes. The following criteria should be considered:

- within process control, mention must be made as to how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent, and

  .. define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.

- how many fruits will be sampled to measure lowest flesh temperature of product?

- if tent fumigation is being performed, by whom and when is the tent checked for holes/tears?

- who, how and when is temperature measuring equipment calibrated? How is this recorded?

- where are in-process gas monitoring lines located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?

- who calculates and who checks required fumigation dosage rate once temperature and volume are calculated?

- how is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?

- who is responsible for checking that the correct amount of fumigant is entered into the chamber/tent?

- what procedures are applied to ensure no leaks from the chamber or tent are evident?

- what period of time after initial fumigant is released into the chamber/tent will verification readings be made, and using what type of equipment?

- calibration of gas measuring equipment is undertaken how frequently and who does this? Calibration details are recorded where?

- at completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?

- who has the authority to sign off the treatment certificates to enable release of produce?

- how is treated product identified as being treated?

All processes undertaken by fumigation treatment centres for New Zealand trade should have written procedures, and the system should be such that it can always stand up to audits.

All fumigations which are undertaken using flexible tent capacities will be subject to AQIS supervision and monitoring procedures to ensure that the requirements as directed above are being undertaken effectively. Fumigations performed in fixed capacity chambers or tents will be monitored by AQIS at frequent intervals during the fumigation season.

It is recommended that treatment centres, when making application for registration for the New Zealand trade, should submit a process control procedures manual for AQIS assessment so that registration and process controls can be assessed and approved simultaneously.

NOTE: although growers and packinghouses associated with strawberry production and packaging do not need to be formally registered for the New Zealand export program, each package of fumigation treated product must be clearly marked with some form of grower and packinghouse identification, along with the exporter's name and address.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on the Transfer Certificate (EX 186) or Notice of Intention to Export/Export Permit (EX 28) and signed off by an AQIS approved officer.

NOTE: Senior Inspectors (Exports) may approve variations to the above documentation requirements to suit a particular State's operating requirements, and the use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is to be used, it is recommended that audits of such systems be undertaken frequently enough to enable confidence within the systems.

3.3.2 Phytosanitary Certificate Endorsements

General Endorsement - 1

"The strawberries in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General Endorsement - 2

"The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

3.4. Dimethoate Dip/Spray

DIMETHOATE DIPPING OR SPRAYING IS KNOWN AS APPENDIX 4 TO THE BQA/IHS

The application of dimethoate dips/sprays is an **approved treatment for tomatoes, capsicums, rockmelons and zucchini fruits/vegetables.**

NOTE: Honeydew melons, cucumbers and scallopinis are not permitted to be treated under this appendix, and reference must be made to Section 3.8 of this Manual for specifications that relate to these products.

TABLE 5

DIMETHOATE DIPPING/SPRAYING
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Capsicum	Not required	Not required	Not required	Yes	Yes
Tomato	Yes	Not required	Yes	Yes	Yes
Rockmelon	Not required	Not required	Not required	Yes	Yes
Zucchini	Not required	Not required	Not required	Yes	Yes

Tomato growers must be registered for the BQA/IHS due to the specific varieties of tomatoes which are permitted to be treated with dimethoate. Tomato growers must include in their registration application a map showing all blocks in which permitted tomato varieties are grown. Reference to individual blocks on this map will be made on the tomato variety declaration, at appendix 3.10 of this manual, for each consignment of tomatoes delivered to registered packhouses. **The five permitted varieties of tomatoes are; Floradade, Sunny, Duke, Hayslip and Tristar.**

Tomato packinghouses are not permitted to pack/treat tomatoes for New Zealand unless they have grower declaration forms showing that the tomatoes are one of the five varieties permitted to undergo dimethoate treatment for export to New Zealand.

To help reduce the possibility of non-approved tomato varieties being inadvertently included in consignments destined for New Zealand, the approved tomato variety **must** be shown (eg. stamped) on all export tomato cartons. It is recommended that differentiation of export and domestic cartons also be implemented. This already occurs in many instances, for example, different trading names/colours are used for domestic and export cartons.

Not withstanding that growers and packinghouses of rockmelons, zucchinis and capsicums need not be specifically registered for the New Zealand program, each package of produce treated under this Section of the Manual will be marked in some way to identify the grower and packinghouse, and must be labelled with the exporter's name and address.

The required dimethoate treatments for tomatoes, capsicums, rockmelons and zucchinis are:

Capsicums: 400ppm dimethoate applied as a spray system only.

Tomatoes: 400ppm dimethoate applied as either a spray system or dipping regime.

Rockmelons & Zucchinis: 400ppm dimethoate applied as a dipping regime only.

NOTE: ***(1) A tolerance in measurement of ±6% (or ±24 ppm) is permitted.***
(2) When using a dipping regime fruit must remain submersed for 1 minute.
(3) When using a spray system for tomatoes the fruit must be sprayed for a minimum of 10 seconds and remain wet for no less than 1 minute.
(4) When using a spray system for capsicums the fruit must be sprayed for no less than 1 minute.

NOTE: should live fruit fly be found during AQIS or exporter inspections following treatment, the dipping treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the dimethoate treatment pathway will be suspended immediately for all Australian products, until an AQIS audit can be undertaken to determine the reasons for such failure, and MAF accepts the findings of this audit

Treatment centres using dimethoate sprays/dips for New Zealand produce must be registered with AQIS for this purpose. When applying for registration, treatment centres should present a procedures manual detailing how their process controls will be implemented. The details of process controls that must be in place are as follows;

- that purchase of bulk chemical be from fresh stocks and certainly made from stock which is not older than 18 months,
- how chemical is be stored at temperatures below 40°C, as it has been determined that at temperatures above 46°C (for even 1 day), the active ingredient will degrade and solution strength will be lessened.
- the use of oils or waxes during the preparation of product prior to the chemical dipping treatment is prohibited.
- all product being treated with chemical dip will be free of soil.
- the chemical dipping process must be the last preparation process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted, following dip treatment.

. the packinghouse/treatment centre will nominate a person/s to undertake the making up of dimethoate solutions and the recording of each consignment or batch lot that is treated and packed for New Zealand,

  - the nominated person/s must satisfy an AQIS authorised officer/inspector they are able to correctly determine the make up of chemical solution strengths, before a packinghouse/treatment centre will be permitted by AQIS to chemically dip/treat fruits destined for the New Zealand market.

. the packinghouse/treatment centre will make up chemical solutions immediately prior to use and will have systems in place for recording solution strengths. The packinghouse or treatment centre will also record details of the mixing of the solution and any topping up of the solution during processing which allows for chemical wash out. Details will include the times and indicate volumes of product treated at the time of topping up.

. each treatment operator will be required to document their method/s of dipping and will include:

  - size of the dip tank,

  - method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc),

  - maximum volume of water required for any/each treatment,

  - amount of chemical needed to achieve the required ppm level active ingredient,

  - minimum allowable solution level,

  - maintenance of active ingredient level (i.e. "top up" levels).

. treatment operators will have an identification system in place which must identify treated products from untreated products and these must be placed on pallets/bins/crates etc in a clear, reasonably permanent manner.

. after dipping as many packages/crates as possible, product must be marked/identified as being "treated".

NOTE: when the processing of any batch is completed, the solution will be completely disposed of. Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems that can demonstrate that they are able to carry over solutions to a following day without losing effectiveness of the chemical solution.

3.4.1 Post Treatment Security - Chemical Dipping/Spraying

Immediately following labelling of packaging, produce must be secured by either:

. shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet), or

. shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom, or

. coolstoring unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product, or

. coolstoring protected in secure packages at any temperature.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the State of operation for assessment and approval.

3.4.2 Post Treatment - Transportation of Product to Export Loading Point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on treatment centre premises.

. supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.

. documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.

. the nominated person can be either the exporter's delegate or the operator of the treatment establishment.

. the exporter or the exporter's delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.

. the exporter or the exporter's delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,

    . if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce or the untreated produce must be properly secured.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.4.3 Phytosanitary Certificate Endorsements

General Endorsement - 1

"The produce (name) in this consignment has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General Endorsement - 2

"The produce (name) in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific Endorsement - Tomato

“This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia”.

3.5 Cold Storage

COLD STORAGE IS KNOWN AS APPENDIX 5 TO THE BQA/IHS

Cold storage disinfestation treatments are permitted for the following commodities;

Citrus fruits Pears Tablegrapes Avocadoes

Growers of commodities that do not have Quarantine Risk Group 2 pests listed in the Pest Lists at Appendix 1 to this Manual do not need to be registered for the New Zealand trade.

Growers of commodities for which in-field controls are required must be registered with AQIS, and must maintain spray and monitoring records to demonstrate that those Quarantine Risk Group 2 pests as listed are being appropriately controlled by field management regimes.

Whilst grower registration may not be mandatory, all packinghouses must provide a list of grower's names, addresses and allocated grower numbers for all produce that is being packed for the New Zealand market.

Note: in the event that fruit fly outbreak suspension zones are implemented within fruit fly area freedom districts, packinghouses must provide a list of growers who are in the declared quarantine suspension zone, and a list of growers who remain in the area freedom districts surrounding a suspension zone.

Not withstanding the above registration requirements, each package of produce destined for New Zealand must contain grower numbers or an equivalent recognised code, packinghouse number and exporter name and address.

Tablegrapes must undergo a mandatory fumigation for the health pest redback spider. For details of the treatment requirements see Section 11 of this Manual and Section 3 regarding fumigator's responsibilities.

TABLE 6
COLD STORAGE DISINFESTATION
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Avocado	Yes	Yes	Yes	Yes	Yes
Citrus	QLD only	QLD only	Yes	Yes	Yes
Pears	Not Required	Not required	No	Yes	Yes
Tablegrapes	Not Required	Not Required	No	Yes	Yes

Avocado growers must be registered to undertake field controls in accordance with New Zealand requirements for the Quarantine Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.

NOTE: should live fruit fly be found during AQIS or Exporter inspections following treatment, the cold storage treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the cold storage treatment pathway will be suspended immediately for all Australian products until an AQIS audit can be undertaken to determine the reasons for such failure and MAF accept the findings of this audit.

3.5.1 Approved Cold Storage Disinfestation Treatments

The following treatment is approved for Queensland fruit fly for the commodities Pears, Tablegrapes and Citrus fruits:

The core temperature of the fruit must be held continuously at

. 0°C or below for not less than 13 days or

. 1°C ± 0.6°C for 16 days.

The cold storage disinfestation for Avocado is:

The core temperature of the fruit must be held continuously at

1°C (±0.2°C) for 16 days.

3.5.2 Registration

Cold storage premises used for cold disinfestation treatments will be registered by AQIS as an approved premises for treating/storing such fruits/vegetables as required under the Export Control Act and Fresh Fruits and Vegetable Orders and specifically for the New Zealand BQA/IHS list of commodities.

3.5.3 Cold Disinfestation Procedures

Note: for avocadoes, it is permissable to have the AQIS inspection either before or after the cold disinfestation treatment. If the AQIS inspection is performed prior to the cold disinfestation treatment, and quarantine pests are found, the consignment will be rejected for export. If the exporter elects to recondition the consignment, reinspection by AQIS must take place prior to any cold disinfestation treatment.

The registered treatment centre must have documented procedures in place for receival, identification by grower and packinghouse, segregation of all New Zealand destined fruits and marking/labelling all New Zealand BQA/IHS produce.

The following specific requirements must be in place to enable cold storage treatment centres to become registered for the New Zealand program:

. minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of fruit or less. For each additional 250 cu.m. of fruit, or part thereof, one additional pulp sensor will be used.

. thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to staff using this equipment for temperature checks.

. the warmest area of each coolstorage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One sensor will be placed in fruit pulp at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors.

3.5.4 Temperature Recording

The following temperature recording requirements must be available before treatment centres will be registered for the New Zealand trade in BQA/IHS commodities:

. Continuous - Strip charts or data log sheets will be held for each cold treatment batch. Note: temperature recorders must be capable of monitoring fruit pulp temperatures—Ryan, Cox or similar air temperature recorders are not acceptable.

. Intermittent - Sensor temperatures will be manually recorded twice daily (morning and afternoon) for each day of the cold treatment and verified once every 4 days by an AQIS authorised officer.

Temperature records will be retained for auditing purposes by AQIS/MAF

NOTE: where the refrigeration unit is equipped with a print out recorder, the AQIS inspector will initiate the treatment when the treatment chamber has stabilised at the required temperature. When cold disinfestation treatment is completed, the AQIS inspector will sign that the treatment has been satisfactorily undertaken and the records covering the treatment will be copied with one copy being retained by the treatment facility and the second copy being retained by the AQIS inspector and filed.

3.5.5 Record Requirements

Details required to be recorded include;

. date and results of sensor/probe calibrations

. date chamber was loaded with produce

. type and variety of produce treated, the quantity by lots involved, all to be identified by packinghouse and exporter.

. date the maximum pulp temperatures initially recorded 1°C $\pm$ 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded or date the pulp temperature of the fruit within the chamber recorded 13 days at 0° or below or equivalent.

. either continuous print out records or records of a.m. and p.m. temperatures within the chamber on a daily basis throughout the treatment program.

. date produce was cleared from chamber with details of post treatment security and dispatch of produce.

. date and results of re-calibration of sensors following completion of treatment.

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

. the security of treated produce whilst on their premises.

. supervision of loading and unloading of all consignments into and out of their premises, identifying and segregating those consignments intended to be treated for New Zealand.

. documenting all incoming and outgoing produce that is intended to be exported to New Zealand.

. the nominated person/s can be either the exporter's delegate or the operator of the treatment establishment.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or product substitution can occur for New Zealand destined produce.

The exporter or the exporter's delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packages of untreated commodities) that could cause cross infestation of cleared produce.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.5.6 Auditing Requirements – Cold Storage Disinfestation Centres

The Senior Inspector (Exports) will be responsible for arranging an audit schedule for cold disinfestation centres and will consider the number and size of treatments being undertaken in determining frequency of audits. It is recommended that each cold disinfestation treatment centre should be audited at least twice during the operating season.

Audits will cover the receival (packer – exporter lots), segregation, identification and treatment of batches and the recording and despatch records, security arrangements when product is loaded, for all treated produce.

3.5.7 Phytosanitary Certificate Endorsements

General Endorsement - 1

"The produce (name) in this consignment has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General Endorsement - 2

"The produce (name) in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific Endorsement - Avocado

“The fruit in this consignment has been sourced from growers and blocks registered with the NVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)”.

Specific Endorsement - Tablegrapes

“The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti (*Australian redback spider*)”.*

Specific Endorsement - Citrus

“The citrus in this consignment has undergone a disease control program that ensures freedom from *Guignardia citricarpa* – Citrus black spot”.

NOTE:the States of South Australia, New South Wales and Victoria, through their Departments of Agriculture, conduct surveys for *Guignardia citricarpa,* and these States are considered free of this disease at this time. The above additional declaration however must be inserted on all phytosanitary certificates for citrus fruits regardless of origin.

3.6 Non Host Status

NON-HOST STATUS IS KNOWN AS APPENDIX 6 TO THE BQA

Some commodities are agreed to by MAF as having non-host status. **Pineapples of the smooth cayenne variety** are fruits which are regarded as a non-host of endemic Australian fruit flies and can be shipped under the BQA subject to normal AQIS inspection and phytosanitary certification.

Growers of pineapple consignments being shipped to New Zealand must have records which can verify the variety of pineapple to be of smooth cayenne parentage.

It is important to note that non-host status applies only to Australian endemic species of fruit flies and therefore, should Australia have an incursion of an "exotic" species of fruit fly for which pineapple may be a host, this Appendix to the BQA may be suspended until the fly is eradicated.

Under this treatment, growers do not need to be registered for the New Zealand trade.

Not withstanding the above, all packages of non-host produce being exported under the BQA/IHS must be clearly marked with some form of grower and packinghouse identification, and exporter's name and address.

Packinghouses who require AQIS inspection on the premises must be registered by AQIS for this purpose as required under the Export Control (Fresh Fruits and Vegetables) Orders.

Exporters of non-host produce will need to be registered as exporters under the BQA/IHS—as even though the fruit is considered non-host status, this is an official treatment under the BQA/IHS, and pathway systems must be in effect.

All smooth cayenne variety pineapples must be secured and protected against substitution or malpractice at all times during transit of fruits which are destined for New Zealand.

Exporters are required to ensure that adequate security from point of loading ex packinghouse through to final export loading has been delegated or undertaken directly by the exporter. Records must be kept throughout any transport movement of non-host products.

3.6.1 Phytosanitary Certificate Endorsement

General Endorsement - 1

"The pineapples in this consignment has been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General Endorsement - 2

"The pineapples in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

3.7 Heat Treatments

HEAT TREATMENTS ARE KNOWN AS APPENDIX 7 TO THE BQA

Heat treatments such as vapour heat treatment (VHT) and high temperature forced air (HTFA) are recognised treatments for some commodities however, at this time Australia has not submitted any efficacy data to MAF seeking approval of VHT or HTFA as approved treatments for all nominated fruit flies for any Australian commodities.

NOTE: Australian disinfestation work for VHT has only been conducted with relation to Queensland and Mediterranean fruit flies.

Should any heat treatments be approved by MAF in the future, requirements and conditions will be included in this Manual at that time.

Australia is not permitted to use heat treatment disinfestation methods for fruit fly host materials exported to New Zealand at this time.

3.8 Dimethoate Dipping - Approved Cucurbits

DIMETHOATE DIPPING - APPROVED PRODUCTS - CUCURBITS IS KNOWN AS APPENDIX 8 TO THE BQA

The cucurbits, cucumber, honeydew melon and scallopini are approved for export to New Zealand under the "approved treatment of dimethoate dipping". Dimethoate spray treatments are not permitted for these approved products.

The conditions and requirements for dimethoate dipping as listed at Section 3.4 of this Manual must be fully complied with. The conditions for identification, segregation, security and documentation requirements must be fully complied with.

Growers and packers of cucumber, scallopini and honeydew melon (which are not listed at Section 3.4) must be registered for the New Zealand trade as this treatment is based on additional field controls for fruit fly, as well as the dimethoate dipping disinfestation treatment. A cucurbit grower declaration form (appendix 3.15 to this Manual) must be completed for each consignment of cucurbits to be treated under appendix 8 to the BQA.

Growers will maintain monitoring and spray diaries and will make these records available to AQIS officers upon request. Growers can elect to use commercial crop monitors for the purpose of monitoring however, all corrective actions must be recorded in spray diaries.

If crop monitors are to be used by growers, the crop monitor must be registered with AQIS for this purpose and all crop monitor records must be made available to AQIS authorised officers for audit purposes.

Growers not adequately maintaining field control monitoring and spray diaries may be suspended from the New Zealand BQA/IHS programs.

NOTE: the Queensland Department of Primary Industries (QDPI) has issued a Farm Note (F76/DEC92) which covers the requirements for field control programs against infestation of *Bactrocera cucumis*. This Farm Note will be the minimum Standard that AQIS will be measuring compliance against. Variations of recommendations in this Standard in regard to the application of sprays will only be permissable when using an AQIS approved crop monitor. All activities relating to field controls must be recorded and held on file for at least 12 months.

Packinghouses packing "approved dimethoate treated products" must maintain identification, segregation and security of all New Zealand destined produce and have such fruits clearly marked. This includes identification, segregation and security from cucurbit species nominated at Section 3.4 of the Manual. For example, zucchini and honeydew melons must be received, processed, packed and stored completely separated from each other.

All packaging of cucurbits must be clearly marked with some form of grower and packinghouse identification, and the exporter's name and address.

3.8.1 Dimethoate Treatment Centre Requirements

All responsibilities as detailed at Section 3.4 of this Manual for treatment centres involved in dimethoate disinfestation procedures must also be undertaken for "approved dimethoate treated products".

3.8.2 Phytosanitary Certificate Endorsements

General Endorsement - 1

"The produce (name) in this consignment has been treated in accordance with Appendix 8 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General Endorsement - 2

"The produce (name) in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific Endorsement - cucumber

"The cucumbers in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*".

Specific Endorsement - honeydew melon

" The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*".

Specific Endorsement - scallopini

"The scallopinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain] and *Tetranychus kanzawai*".

3.9 Methyl Bromide Fumigation - Approved Products

METHYL BROMIDE FUMIGATION - APPROVED PRODUCTS - WATERMELON IS KNOWN AS APPENDIX 9 TO THE BQA.

Watermelon is the only product that is approved for methyl bromide fumigation treatment under appendix 9 to the BQA.

All the requirements listed at 3.3 of this Manual (Fumigation Treatments) must be applied, including treatment times, temperatures and dose rates. The responsibilities of packinghouses, treatment centres and exporters as detailed at Section 3.3 of this Manual must be fully complied with at all times. All recording must be retained on file and made available at any time to AQIS authorised officers.

In addition to the responsibilities listed at Section 3.3 of this Manual, growers of watermelons must be registered with AQIS for the purpose of maintaining field controls to minimise the risk of fruit fly infestation whilst fruit is being produced. Growers must maintain property pest monitoring diaries and spray diaries for each field of watermelons being produced. A cucurbit grower declaration form (appendix 3.15 to this Manual) must be completed for each consignment of cucurbits to be treated under appendix 9 to the BQA.

Packinghouses are required to be registered because of their responsibility to maintain security of watermelon whilst on the packing premises.

All packages of watermelon must be marked with some form of grower and packinghouse identification, and the exporter's name and address on them.

Exporters are responsible to ensure that the security of the watermelons during all phases of transportation cannot be breached and that the produce cannot be reinfested or substituted following treatment.

3.9.1 Phytosanitary Certificate Endorsement

General Endorsement - 1

"The watermelons in this consignment has been treated in accordance with Appendix 9 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General Endorsement - 2

"The watermelons in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific Endorsement - watermelons

The watermelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*".

3.10 Winter Window – Field Control Systems Approach

FIELD CONTROL – SYSTEMS APPROACH – CUCURBITS – "WINTER WINDOW" ACCESS IS KNOWN AS APPENDIX 10 TO THE BQA/IHS.

A "winter window" access period has been negotiated between MAF New Zealand and AQIS, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit

fly). The "winter window" therefore specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment of these commodities. The access period is for those cucurbits exported (arriving in New Zealand) between **1 May and 30 September in any year**.

Although cucurbits require no post-harvest treatments for cucumber fly for "winter window" access, additional fruit flies have been listed as Risk Group 3 pests for most cucurbits. Area freedom must be established before these commodities can be exported to New Zealand under this appendix.

Accordingly, **rockmelons, honeydew melons** and **cucumbers** can be exported under this appendix, but only from the states of Queensland, New South Wales, Victoria and Tasmania (for which area freedom from Mediterranean fruit fly has been established).

As cucumber fruit fly is the only Risk Group 3 pest listed for **watermelons**, this commodity can be exported under this appendix from all areas in Australia.

Because Queensland fruit fly has been listed as a pest of **zucchinis** and **scallopinis** (in addition to Mediterranean fruit fly and cucumber fruit fly), zucchinis and scallopinis can only be exported under this appendix from areas where area freedom from both Meditteranean fruit fly and Queensland fruit fly has been established (that is, the Riverland, Sunraysia, MIA-Riverina and Tasmania).

Should live fruit fly infestation be found in New Zealand the consignment will be reshipped, destroyed or subject to treatment at the New Zealand Ministry of Agriculture and Forestry – Chief Plants Officer's discretion (on a case by case basis).

3.10.1 Grower Responsibilities

All growers wishing to participate in trade under Appendix 10 to the BQA will have all blocks registered for the New Zealand program. Applications for Registration will be made to the AQIS office in the growers Region. This application must be received by AQIS 6 weeks before the anticipated harvest of the first crop.

Upon receipt of the Application, AQIS inspection staff will visit the property to validate blocks and crops and ensure the grower/s is/are aware of their responsibilities and issue the grower with a grower registration number. AQIS will undertake monthly audits of grower properties throughout the growing/harvesting season. All audits of growers will be charged to the packinghouse who is packing the grower's fruits/vegetables.

Growers must commence applying recommended field control programs for the pest *Bactrocera cucumis* at least 4 weeks prior to first harvest for New Zealand. Growers are required to conduct field monitoring and keep spray diary records for all activities relating to each block registered for the New Zealand program. A cucurbit grower declaration form (appendix 3.15 to this Manual) must be completed for each consignment of cucurbits to be exported under appendix 10 to the BQA.

NOTE: the Queensland Department of Primary Industries (QDPI) has issued a Farm Note (F76/DEC92) which covers the requirements for field control programs against infestation of *Bactrocera cucumis*. This Farm Note will be the minimum Standard that AQIS will be measuring compliance against. Variations of recommendations in this Standard in regard to the application of sprays will only be permissable when using an AQIS approved crop monitor. All activities relating to field controls must be recorded and held on file for a 12 month period.

3.10.2 Packinghouse Responsibilities

Packinghouses supplying cucurbits to New Zealand under Appendix 10 of the BQA will be registered for this purpose. Packinghouses must maintain a register (names, addresses and grower number) for all growers supplying commodities under the "winter window" access conditions.

Packinghouses must identify "winter window" receivals immediately as they arrive, and the product must be secured and segregated from all other produce, regardless of whether these other commodities are for export or domestic markets.

Produce packed under Appendix 10 must be packed as discrete lots and cannot be packed for the New Zealand program if any "non-field controlled produce" is located within the premises.

Following packing, the produce must be immediately secured against possible reinfestation or cross- contamination. Security can be effected by one or more of the following means;

- produce is packed into non-ventilated cartons with gaps on the carton flaps not to exceed 1.6 mm. At any point,
- Cartons/pallets can be put into discrete storage areas including cool or controlled temperature rooms,
- cartons/pallets can be covered by tarps or shade mesh cloth that are sandbagged to floor areas,
- shrinkwrapping of all cartons/pallets.

AQIS will monitor regularly and audit packinghouses at monthly intervals throughout the season to ensure compliance with the above requirements. Packinghouses who are found not to be complying with identification, packing and final product security will be suspended from the program immediately.

3.10.3 Inspection of Produce

Packinghouses will undertake a grower line inspection (600 units) for each grower making up a consignment. Persons undertaking these inspection procedures must be aware of the New Zealand pest lists and be experienced in inspection duties. Records of these inspections (see Appendix 3.4) must be made and retained. Any commodity that contains suspect fruits (soft spots, rots etc.) must be cut and inspection results recorded.

Following grower line inspections, an exporter inspection (on a consignment line – 600 unit basis) must be undertaken. The exporter can delegate these duties to a packinghouse representative but this must be done in writing and the packinghouse personnel must acknowledge and accept the delegation duties. If the packinghouse is to undertake this inspection, full details of the inspection will be recorded (see Appendix 3.4).
Upon receipt of the above inspection records, AQIS will undertake a 600 unit consignment line inspection for each consignment. AQIS inspections will also be recorded as per Appendix 3.4.

Should during AQIS inspection live fruit fly be detected, the packinghouse and grower supplying the offending fruits/vegetables will be suspended from this program until a full audit of both parties is conducted.

3.10.4 Transporting and Loading into Export Containers

If "winter window" product is to be loaded into export containers at the packing premises, the packinghouse will ensure that there is minimum time delays in moving fruits/vegetables from the

secure area into the container/s. Product cannot be left in an unsecure environment for more than 15 minutes. This should enable the packinghouse to attend to any trade description requirements, which may need to be applied before final loading.

“Winter window” fruits/vegetables which are to be transported to another destination for export loading must be subjected to strict security provisions. The transport must be clean and not carrying any unprotected fruit fly host commodity. That is, either the other commodities are secured (shrinkwrap or similar) or the “winter window” produce must be secured.

The exporter must delegate nominated persons to ensure security of produce will be maintained and the nominated persons must acknowledge and accept these responsibilities in writing.

The receival depot or centre must be able to unload the “winter window” fruits/vegetables quickly and secure the produce immediately on arrival. Security will be as indicated in Section 3.10.2 above.

The receival depot/centre will, when loading the fruits/vegetables into a final destination container, ensure the movement of fruits during loading will cause minimum time delays to ensure the produce is not exposed to the environment for any period exceeding 15 minutes.

AQIS will audit receival depot/centres at least monthly to ensure compliance is being maintained. Additional audits may be undertaken at the discretion of the Senior Exports Inspector.

3.10.5 Phytosanitary Certification

General Endorsement - 1

"The cucurbits (name) in this consignment have been treated in accordance with Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General Endorsement - 2

"The cucurbits (name) in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific Endorsements - Cucumber

" The cucumbers in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"

"The cucumbers in this consignment have been sourced from the state of (name) which is declared free from the pest *Ceratitis capitata*"

Specific Endorsements - Honeydew melon

" The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"

"The honeydew melons in this consignment have been sourced from the state of (name) which is declared free from the pest *Ceratitis capitata*"

Specific Endorsements - Rockmelon

" The rockmelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"

"The rockmelons in this consignment have been sourced from the state of (name) which is declared free from the pest *Ceratitis capitata*"

Specific Endorsements - Scallopini

" The scallopinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain] and *Tetranychus kanzawai*"

"The scallopinis in this consignment have been sourced from an area free from the pests *Ceratitis capitata* and *Bactrocera tryoni*"

Specific Endorsement - Watermelon

"The watermelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci*, *Tetranychus kanzawai* and *Thrips palmi*"

Specific Endorsement s- Zucchinis

" The zucchinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain] and *Tetranychus kanzawai*"

"The zucchinis in this consignment have been sourced from an area free from the pests *Ceratitis capitata* and *Bactrocera tryoni*"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Attachment 1 to Section 3 – Summary of requirements for access of fruit fly host commodities into New Zealand from Australia

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Avocado	Area freedom	☐	☐	☐		☐	- "The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The avocadoes in this consignment have been sourced from growers and blocks registered with the ANVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)"
Avocado	Cold storage 1°C (±0.2°C) for 16 days	☐	☐	☐	☐	☐	- "The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The avocadoes in this consignment has been sourced from growers and blocks registered with the ANVAS tree certification scheme to ensure freedom from Sun Blotch Viroid (SBV) and have undergone field management regimes for the control of Cercospora Spot Blotch (CSB)"
Banana	Export prohibited						
Capsicum	Area freedom			☐		☐	- "The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The capsicums in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Bactrocera bryoniae* and *Thrips palmi*".

COMMODITY	TREATMENT	REGISTRATION REQUIRED	ADDITIONAL DECLARATIONS

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

		GR	GM	PR	TR	ER	
Capsicum	Dimethoate (spray only) 400ppm and fruit must be sprayed for a minimum of one minute				☐	☐	- "The capsicums in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The capsicums in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Bactrocera bryoniae* and *Thrips palmi*".
Citrus	Area freedom	QLD	QLD	☐		☐	- "The …….. [type of citrus] in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The …….. [type of citrus] in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The …….. [type of citrus] in this consignment have undergone a disease control program that ensures freedom from *Guignardia citricarpa* – citrus black spot
Citrus	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	QLD	QLD	☐	☐	☐	- "The …….. [type of citrus] in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The …….. [type of citrus] in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The …….. [type of citrus] in this consignment have undergone a disease control program that ensures freedom from *Guignardia citricarpa* – Citrus black spot"
Cucumber	Area freedom			☐		☐	- "The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Cucumber✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	□	□	□	□	□	- "The cucumbers in this consignment have been treated in accordance with Appendix 8 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"
Cucumber✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The cucumbers in this consignment have been treated in accordance with Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*" - "The cucumbers in this consignment have been sourced from the state of (name) which is declared free from the pest *Ceratitis capitata*"
Grape	Area freedom			□	□	□	- "The grapes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti* (Australian redback spider)"
Grape	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days				□	□	- "The grapes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The grapes in this consignment have undergone an agreed fumigation treatment that is effective against *Lactrodectus hasselti* (Australian redback spider)"
COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Honeydew	Area freedom			☐		☐	- "The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"
Honeydew✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	☐	☐	☐	☐	☐	- "The honeydew melons in this consignment have been treated in accordance with Appendix 8 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"
Honeydew✞ (1 May – 30 Sep)	Winter Window	☐	☐	☐		☐	- "The honeydew melons in this consignment have been treated in accordance with Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*" - "The honeydew melons in this consignment have been sourced from the state of (name) which is declared free from the pest *Ceratitis capitata*"
Mango	Export prohibited						
Papaya	Export prohibited						
Pears	Area freedom			☐		☐	- "The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Pears	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days				☐	☐	- "The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Pineapple (smooth cayenne only)	Non-host status			☐		☐	- "The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Pumpkin	Area freedom			☐		☐	- "The pumpkins in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pumpkins in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Rockmelon	Area freedom			☐		☐	- "The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"
Rockmelon	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute				☐	☐	- "The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Rockmelon✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The rockmelons in this consignment have been treated in accordance with Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain], *Tetranychus kanzawai* and *Thrips palmi*" - "The rockmelons in this consignment have been sourced from the state of (name) which is declared free from the pest *Ceratitis capitata*"
Scallopini	Area freedom			□		□	- "The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain] and *Tetranychus kanzawai*"
Scallopini✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	□	□	□	□	□	- "The scallopinis in this consignment have been treated in accordance with Appendix 8 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain] and *Tetranychus kanzawai*"
Scallopini✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The scallopinis in this consignment have been treated in accordance with Appendix 10 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The scallopinis covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* [strain] and *Tetranychus kanzawai*" - "The scallopinis in this consignment have been sourced from an area free from the pests *Ceratitis capitata* and *Bactrocera tryoni*"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Strawberry	Area freedom			☐		☐	- "The strawberries in this consignment have been treated in accordance with Appendix 2 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The strawberries covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF."
Strawberry	Methyl bromide 48g/m^3 for 3 hours at a temperature of at least 15°C				☐	☐	- "The strawberries in this consignment have been treated in accordance with Appendix 3 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The strawberries covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF."
Tomato	Area freedom			☐		☐	- "The tomatoes in this consignment have been treated in accordance with Appendix 2 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The tomatoes covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - "The tomatoes in this consignment have undergone appropriate pest control activities that are effective against *Bactrocera bryoniae*, *Bactrocera musae*, *Bemisia tabaci* and *Thrips palmi*"
Tomato	Dimethoate (spray or dip) 400ppm and fruit must remain wet for a minimum of one minute	☐		☐	☐	☐	- "The tomatoes in this consignment have been treated in accordance with Appendix 4 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The tomatoes covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - "The tomatoes in this consignment have undergone appropriate pest control activities that are effective against *Bactrocera bryoniae*, *Bactrocera musae*, *Bemisia tabaci* and *Thrips palmi*" - "This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia"
Watermelon	Area freedom			☐		☐	- "The watermelons in this consignment have been treated in accordance with Appendix 2 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The watermelons covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci*, *Tetranychus kanzawai* and *Thrips palmi*"
COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Watermelon✞	Methyl bromide 32g/m^3 for 4 hours at a temperature of 21°C to 26°C	□	□	□	□	□	- "The watermelons in this consignment have been treated in accordance with Appendix 9 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The watermelons covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci*, *Tetranychus kanzawai* and *Thrips palmi*"
Watermelon✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The watermelons in this consignment have been treated in accordance with Appendix 10 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The watermelons covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci*, *Tetranychus kanzawai* and *Thrips palmi*"
Zucchini	Area freedom			□		□	- "The zucchinis in this consignment have been treated in accordance with Appendix 2 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The zucchinis covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* and *Tetranychus kanzawai*"
Zucchini	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute				□	□	- "The zucchinis in this consignment have been treated in accordance with Appendix 4 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The zucchinis covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* and *Tetranychus kanzawai*"
Zucchini✞	Winter window	□	□	□		□	- "The zucchinis in this consignment have been treated in accordance with Appendix 10 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of fruit fly host material into New Zealand." - "The zucchinis covered by this phytosanitary certificate have been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests as specified by New Zealand MAF." - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against *Bemisia tabaci* and *Tetranychus kanzawai*" - "The zucchinis in this consignment have been sourced from an area free from the pests *Ceratitis capitata* and *Bactrocera tryoni*"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required

PR packinghouse registration required
TR treatment registration required
ER exporter registration required

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SECTION 4. MANAGEMENT RESPONSIBILITIES

This section lists and describes the responsibilities associated with any BQA/IHS export pathway to be performed by all those organisations, groups and individuals to ensure that the BQA/IHS is developed, maintained and audited to standards that ensure confidence in the systems being implemented and accuracy in the phytosanitary certification which must be provided for export of fruit fly host products to New Zealand.

4.1 AQIS Canberra Office

The AQIS organisation structure and management flow chart is at Attachment 1 at the end of this Section. It is recommended that each AQIS Regional Office and/or State Department develop its own organisation structure and management flow chart as it will apply to the management and auditing of the Australian - New Zealand BQA/IHS and include this information for distribution within that State.

Manager - Plant Programs Section - Animal and Plant Programs Branch

. will be responsible for ensuring;

- all components of the BQA/IHS Systems Operations Manual are being complied with consistently, over all commodities and treatments through all States.

- by delegation within Plant Programs Section, for all establishments/premises that are required to be registered, that regular audits of State Departments (where applicable) and AQIS Region/State Office systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the BQA/IHS and that a proper record management system is available and easily accessible.

- for Certification Assurance (CA) establishments, that AQIS Region/State Offices are conducting audits of these establishments in accordance with the requirements of QMP - SM - 01 and the requirements of the BQA/IHS and this Manual.

- that wherever deficiencies are found in the systems, either at or within the States' responsibilities, that any adverse findings are recorded and corrected at the earliest opportunity and are subsequently re-audited to verify that corrective action requests have been satisfactorily implemented.

- collate and circulate up to date National lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.

- that all amendments to this Manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.

- ensuring that audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and

monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

4.2 State Departments of Agriculture (or equivalents)

Where AQIS is not directly represented at State level (Tasmania, Western Australia and Northern Territory), State Departments of Agriculture or their equivalents are responsible for the following;

. the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,

. ensure all exporters, treatment centres, packinghouses and growers (where applicable) are meeting the requirements of the BQA/IHS and the directions contained in this Manual,

. ensuring inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities from that State that are being exported to New Zealand,

. ensuring they have registered all required components of the export pathways for commodities being exported through that State and have a Register of registered growers, packers, treatment centres and exporters for the BQA/IHS commodities which have been forwarded to AQIS Canberra Office, and that there are systems in place to forward amendments to the Register on a frequent basis (monthly),

. ensuring that audits (including internal audits) are being conducted at the correct frequency so that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,

. ensuring that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed.

. where required, ensure that the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual State management plans (as submitted to MAF New Zealand), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of New Zealand NASS Standards 158.03.06 and 158.03.07 and

- will report to AQIS Canberra Office any detections of economically significant fruit fly species found within trapping grids within 24 hours of identification.

4.3 AQIS State Offices

AQIS State Offices, through the Regional Managers and Program Managers (Exports), located in Queensland, New South Wales, Victoria and South Australia are responsible for the following;

. the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,

- ensuring all exporters, treatment centres, packinghouses and growers (where applicable), are meeting the requirements of the BQA/IHS and the directions contained in this Manual,

- ensuring inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities that are being exported to New Zealand from that State,

- ensuring they have registered all required components of the export pathways for commodities being exported through that State,

- ensuring that audits (including internal audits), are being conducted at the correct frequency and that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,

- ensuring that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed,

- ensuring all inspectors in their State, involved in the New Zealand BQA/IHS export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported to them by Canberra Office, in any district of Australia,

- ensuring Canberra Office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

4.3.1 Registration Requirements

AQIS Offices and State Department agencies will implement a registration system for all growers (where applicable), packinghouses (where applicable), treatment centres and exporters who intend to produce, pack, treat and export fruits and vegetables as listed in this Manual for export to New Zealand.

AQIS prefers that growers should register for the New Zealand programs with their packinghouse or exporter however AQIS will accept grower applications for registration at local offices, State Departments of Agriculture or their equivalent. Whichever authority accepts the registration of growers/properties, they will be responsible to ensure that registration details are forwarded to both the AQIS State Office and the AQIS Canberra Office. The accepting authority will also be responsible for ensuring grower spray and monitoring diaries are current and relevant.

Growers of commodities who require registration will not be permitted to participate in the New Zealand trade for that commodity, unless AQIS has details of the properties or blocks for registration, of that grower.

All organisations that are undertaking approved disinfestation treatments must be registered, packinghouses where required for specific commodities must be registered and all exporters of fruit fly host commodities (including non-host commodities) must be registered for each commodity.

It is the responsibility of each individual State/region to develop a system of recording Registrations, and that such records are maintained so they are auditable.

Registration details will include name, address, unique number identifier, purpose of registration (grower, packer, treatment centre etc.), and current status e.g. active/non active.

AQIS State Offices and State Department Agencies must forward a list of registrations made

in that State to Canberra Office for an Australian consolidated list. A list of current registrations should be forwarded prior to the commencement of each commodity season and must be updated/amended as new applications are processed during a season. Canberra Office will make this list available to all State Offices/Agencies through the LAN computer network or hard copy documents.

NOTE: this information is extremely important, particularly when exporters are sourcing fruits from interstate but assembling export consignments in their home State prior to export to New Zealand.

4.3.2. Sampling Requirements

4.3.2.1 Consignment Line Samples

Following individual grower line inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines can only consist of the one genus of fruits/vegetables. For example, lemons, oranges and mandarins that have had a common treatment (area freedom) or one treatment centre (cold storage disinfestation) applied.

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. There can be no rules of how this requirement is applied, however, the following guidelines may assist in determining selection of sample cartons;

- select one or more samples from the grower submitting the largest lot within the consignment,
- select one or more samples from the commodity comprising the greatest quantity in the consignment line,
- select at least one carton from the commodity seen to present the greatest quarantine risk,
- select at least one carton from any known “poorer” performing growers/packers or from a newly registered grower or packer.

Consignment lines that are passed after AQIS inspection will be identified as “passed for New Zealand” and immediately separated from any other produce which has not been passed or is not destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.2.2 Grower Line Samples

A grower line is a number of packages of one commodity from one grower with one common treatment, presented for inspection at one time. This includes a grower line that is presented for inspection that will subsequently be split into separate consignments for export.

Grower lines that are passed after AQIS inspection, will be identified as “passed for New Zealand” and immediately separated and segregated from any other produce which has not been passed or is not destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.3 AQIS Inspection Procedures

AQIS will carry out inspections as required under the New Zealand BQA/IHS only where establishments provide an area which is suitable for the purpose and contains:

- a suitable bench or table on which to work,
- suitable fixed lighting of a minimum of 600 lux,
- a clean and relatively noise free area in which to perform inspection functions,
- all relevant BQA/IHS documentation covering the line to be inspected is available prior to the inspection commencing.

Inspections performed by AQIS for the BQA/IHS programs will be recorded on "Inspection Record - New Zealand", attached at Appendix 3.4.

NOTE: alternative types of Inspection records can be developed and used as long as they contain at least as much information supplied on the inspection record sheet as detailed in Appendix 3.4

AQIS inspection may be by grower line or by consignment line at the option of the exporter (but either the exporter or packinghouse must have undertaken grower line inspection and provide detailed records of such inspections), and will be in accordance with the sampling plan detailed in Table 1 and at the same sample regime as used by the exporter/exporter delegate.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one commodity group.

NOTE: not withstanding the requirements of this Manual, should AQIS consignment inspection result in a rejection for quarantine purposes, the whole consignment is rejected not just that particular grower line. If the exporter requires the balance of the consignment for export purposes, the exporter/exporter delegate must re-inspect the balance of the consignment (as it is a new lot), by grower line before AQIS will re-inspect.

Exporters will provide AQIS officers with inspection records of the consignment line/grower line inspection details before AQIS will commence their inspection. If all records are not provided or any records are incomplete, the consignment will not be inspected until these records are completed and sighted.

NOTE: AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest. This must be undertaken until industry can provide clear scientific evidence that the mealybugs *Ferrisia virgata, Maconellicoccus hirsutus, Nipaecoccus viridis and Planococcus pacificus* are not associated with this export pathway.

4.3.4 Rejection Procedures

A rejection upon inspection by AQIS of either a consignment or grower lot does not necessarily indicate that a packinghouse or grower has breached the conditions of the Arrangement It should however indicate a possible problem within the packer/exporter system and therefore it will be recorded.

All rejections are to be recorded on Form Ex 161 (Inspection Advice Note) and must detail the grower, packer and exporter/delegate through which the commodity has passed.

Exporters/exporter delegates who fail two inspections in any one season must be audited immediately. This will ascertain if there are reasons that AQIS may consider necessary for suspending the nominated inspector/quality controller from the New Zealand programme, or if corrective actions can be implemented quickly and there is a possible need for a follow up audit within 7 days.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for Quarantine Risk Group 3 Pests - Immediate suspension of treatment centre (and in the case of "Area Freedom from Fruit Flies", all area freedom districts in that State are suspended), and the possible suspension of other elements of the export pathway as may be determined by audit. Audit/s to be undertaken at earliest opportunity.

- Any rejection for Quarantine Risk Group 2 Pests - Senior Inspector/Supervisor to be informed immediately to consider if audit of grower, packer, exporter or exporter delegate is necessary. This may depend on type and quantity of infestation detected.

- Any rejection for Quarantine Risk Group 1 Pests - The consignment can be totally withdrawn from the New Zealand export market, or corrective action can be undertaken. Corrective action can be performed by either treating the product (fumigation etc.) or by the exporter withdrawing the offending part of the consignment and undertaking reinspection before re-presenting the remaining part of the consignment for further AQIS inspection.

4.3.5 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed including any that may have not been forwarded to New Zealand (That is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: the "split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has given approval that the necessary documentation and record keeping to be used for these procedures is both satisfactory and auditable.

This procedure will allow one inspection at the fee for service rate and the first phytosanitary certificate free. All subsequent phytosanitary certificates, both originals or certified copies, will be charged for at the rate determined in the Fees Orders.

Split consignments, where exporters/importers want to reduce the MAF on arrival inspection, must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

- notification of consignment details to MAF as they occur,

- the New Zealand communication links (importer and MAF contacts),

- flow chart detailing how the phytosanitary certificate moves through the system.

Each such procedure must have AQIS and MAF approval before implementation.

4.4 Untreated Produce Being Forwarded from Country Areas

Growers who are involved with Risk Group 2 and 3 commodities and, who will be forwarding untreated produce from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate) signed by an authorised AQIS officer, or a signed copy of an EX 28 Notice of Intention to Export, or, a grower declaration form attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide either the transfer certificate, Notice of Intention to Export or grower declaration to AQIS, prior to any AQIS inspection being undertaken.

4.5 AQIS Auditing Requirements

4.5.1 AQIS BQA/IHS Audit Requirements

AQIS inspection staff are to conduct audits of growers (where applicable) to ensure compliance with registration requirements. Such audits are to include an assessment of growing practices, field hygiene, pest monitoring, spray diary entries and SBV status (avocado growers only). AQIS however, may not audit all individual growers who are supplying fruit to:

- * CA accredited packinghouses,
- Packinghouses who pack commodities which do not require grower registration,
- * Growers who are using the services of a registered crop monitor.

* However, some growers under these regimes must be audited as part of the audit of the packinghouse establishments as documented in Grower/Audit frequency, Section 4.8.1 of this Manual.

4.5.1.1 Grower/Audit Frequency:

AQIS audits of growers will be conducted where a commodity has Quarantine Risk Group 2 pests listed which require field management controls. To enable phytosanitary certification in accordance with New Zealand's requirements, audits will be conducted to ensure compliance with the stated directions contained in this Manual.

Grower registration is required for some of those commodities for which Risk Group 2 pests are listed, and for those commodities being exported under appendices 8, 9 and 10 to the BQA (section 3.8, 3.9 and 3.10 of this manual). Registered growers must undertake all the required monitoring and field controls, and keep records of all management surveillance and corrective actions.

The accepting authority for grower registrations will ensure audits are conducted and ensure property records are maintained in accordance with the directions in this Manual.

Upon application to be a registered grower, the accepting authority will conduct an “initial” audit of the grower's property and record keeping, to satisfy themselves that the grower can meet the requirements of this Manual for that commodity. Following an initial audit, growers will have at least one other "additional audit" during the subsequent growing season.

For growers previously registered and having successfully participated in the New Zealand program the previous season/year, one audit will be formally conducted early in the new picking/packing season. (That is, no initial audit is required in subsequent years/seasons providing registration and supply to New Zealand has been continuous).

Should deficiencies be found at anytime during the registration period, follow up audits will be required to ensure corrective actions have been completed which will allow registration to be continued. Should a grower not manage the registered property in accordance with the directions of this Manual, and make no corrective action where deficiencies are detected, the property must be placed under suspension from the New Zealand program.

Where an Agency other than AQIS has placed a property under suspension from New Zealand trade, that Agency must inform their AQIS State Office of the suspension at the earliest opportunity. The AQIS State office will advise inspection staff in the area of property suspension and advise AQIS Canberra Office as soon as possible after obtaining such a report.

All audits of growers (AQIS or State Department staff), will be "announced audits" giving the grower at least two days notice. All AQIS audits are chargeable with the times involved being debited to the exporter or packinghouse with whom the grower will be supplying product.

Unannounced monitoring audits can be conducted if in the opinion of the Senior Inspector (Exports) a need is demonstrated. Unannounced monitoring audits are not chargeable unless a major non-conformance is detected.

4.5.1.2 Grower Audits - Certification Assurance Systems

Where a packinghouse has an approved Certification Assurance Arrangement with AQIS, and is involved in a commodity for which the grower must be registered, the packinghouse must register and audit those growers to ensure that the stipulated field management controls are being effected.

During normal AQIS auditing of an establishments' CA Arrangement, a sample of registered growers will be audited as part of the overall quality system for compliance with the requirements of the BQA/IHS and the directions given in this Manual. If a major non-conformance is detected at such grower audits, the suspension of the packinghouse may be considered necessary as it is the packinghouse that is responsible for ensuring compliance with AQIS/New Zealand requirements.

4.5.1.3 Audit Requirements/Growers - Suspension Criteria

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

. no pest control or monitoring records,

. bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,

. bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.

. evidence of growers not committed to carrying out the requirements as set out in this Manual,

. no corrective action to control quarantine weeds/seeds or pests and diseases,

4.5.1.4 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow-up audit, should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

. inadequate monitoring/spray records,

. insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),

. evidence of quarantine weeds within the property (but not yet seeding),

. adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days or a week or so, is dependent on the type of problem and the relationship to growing/harvesting of the current crop. Senior Inspector (Exports) will have to determine whether follow up audits will be required or not.

4.6 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent) to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or their equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for, and, such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where, through AQIS packinghouse grower audits, it is found that at least three growers are covered by the same crop monitor, and grower audit reveals substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived by the Senior Inspector (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

4.6.1 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

. failure to maintain individual grower records,

. inadequate or incorrect records,

. failure to provide growers with a record of each visit including any recommended pest control measures,

. recommendations to growers to apply non-recommended or unregistered chemicals.

4.7 Audit Requirements/Packinghouses

All packinghouses packing BQA/IHS produce will be audited annually (minimum) for compliance with grower numbers/addresses registers, training of staff within the establishment, completion and storage of records and security responsibilities. Variance to audit requirements can be made at the discretion of the Senior Inspector (Exports).

Packinghouses involved in those commodities with Risk Group 2 pests, for which grower registration is required, will be subject to AQIS audit on initial application/registration under the New Zealand requirements, and then at least on one further occasion during the actual packing season.

Packinghouses which are involved in physical or chemical disinfestation treatments for the New Zealand BQA/IHS will be subject to auditing requirements against the directions contained in Section 3 - Approved Treatments, of this Manual.

A packinghouse that has been delegated and accepted exporter inspection duties as required by this Manual, will be audited to ensure that all such inspections have been conducted in accordance with the directions of this Manual, and that proper records have been maintained and filed.

Where packinghouses are required to be registered under two or more of the above criteria, audits of each element requiring registration will be conducted in one audit.

If a packinghouse audit detects minor non-conformities against the requirements and directions of this Manual, the packinghouse will be required to address the concerns, and a follow up audit will be scheduled within 7 days.

If a packinghouse audit detects major non-conformance in any element, consideration will be made as to whether the packinghouse should be suspended until the required corrective action has been implemented and successfully re-audited. The Senior Inspector (Exports) will have the authority to assess and implement the necessary actions, depending on the circumstances surrounding a non-conformance against the systems.

The basis of all packinghouse audits is to ensure it is performing its responsibilities for those commodities/treatments/inspections under the BQA/IHS arrangements and the directions of this Manual.

CA accredited packinghouses will be audited for compliance with the New Zealand BQA requirements under their existing audit programmes.

All audit time involved at the packinghouses is to be charged to the packinghouse involved.

4.7.1 Packinghouse Audits/Non Compliance

AQIS may deregister a packinghouse for the New Zealand BQA/IHS if:

- the packinghouse was sourcing fruit/vegetables from unregistered growers where it is a requirement of this Manual for them to be registered.

- the packinghouse did not have procedures in place for identifying commodity specific registered grower/s,

- the packinghouse did not mark packages with a registered grower and packinghouse number,

- the packinghouse did not have procedures in place to segregate commodity specific growing lines through the packing process, (including area freedom treatment commodities),

- the packinghouse did not have trained staff operating at the time of packing BQA/IHS produce that could recognise pests, disease and weed seeds that are of concern to New Zealand,

- the packinghouse did not have procedures in place to deal with suspect fruit with a sting, rot or bruise,

- the packinghouse did not comply with "inspection procedures" as delegated and accepted by them through their exporter,

- the packinghouse did not comply with any other requirement set out in the BQA/IHS and the directions contained in this Manual.

4.8 Audit Requirements - Treatment Centres

Each treatment centre (either fumigation, chemical dip/spray treatment or cold) is responsible for clear, precise, documented and auditable procedures that detail how product relating to the BQA/IHS process is handled. Such procedures will include:

1. How product is identified
2. How product is treated and marked as treated.
3. The treatment process and controls.
4. How treatment records are documented
5. How measuring equipment is calibrated and how often and by whom.
6. Security of product after treatment.
7. Segregation of treated product from untreated product.
8. Supervision of loading.

Each treatment centre establishment (excepting fumigation facilities which are subject to direct supervision of each treatment performed) will be audited by AQIS at least once a month unless a premise has a CA arrangement with AQIS. Audit reports will be kept on file for a period of not less than 2 years.

AQIS requires that all treatment centres (other than fumigation centres) be monitored on a monthly basis during their operating season, and that audit reports are to be kept detailing when auditing/monitoring checks were performed. These audits/monitoring checks can be undertaken as part of inspection duties where inspections are performed at such centres but reports must be written and placed on file when they are actually undertaken.

Note: the Senior Inspector (Exports) has the authority to vary the above audit requirements on the basis of compliance with the operating instructions of this Manual. That is, in the case of continued substantial compliance, audit intensity may be reduced; in the case of marginal compliance or repeated non-conformance, intensity may need to be increased.

Inspectors must ensure that:

. treatment facilities are maintained in a condition that will provide efficacy in treatment programs,

. all measurement gauges are calibrated regularly, and records are maintained to verify this,

. all movement of treated produce is documented, particularly in relation to load-out activity,

. product security is maintained at all times.

4.8.1 Treatment Centre Audits/Non Compliance

If monitoring/audit checks being carried out on treatment centre premises reveal non-conformances, an official audit must be scheduled as soon as possible so as to instigate corrective action. Findings that may lead to suspension as a registered treatment centre or increased auditing scheduling under the BQA/IHS will include :

. insufficient/improper identification of treated and untreated product,

. incorrect treatments,

. improper documentation,

. no calibration or records of calibration regarding measuring equipment,

. no segregation of untreated product and treated BQA product,

. product not correctly marked as treated or secured after treatment.

All audit time is to be charged to the treatment centre involved.

4.9 Audit Requirements - Exporters

AQIS will perform an audit of all exporters registered for the New Zealand programme on an annual basis. All relevant documentation for all New Zealand BQA/IHS consignments must be made available to the AQIS authorised officer. Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter/exporter delegate inspections, export documentation including EX 186 - Transfer of Product (or equivalent documents), EX28's - Notice of Intention to Export and Phytosanitary Certificates.

4.9.1 Exporter Delegate Audits

In addition to any scheduled packinghouse audit where packinghouse personnel are also approved to act as an exporter delegate for the purpose of inspection, treatment and/or load out security, two audits per year will be conducted on the exporter delegates responsibilities and their records. Audits will include inspection documentation, knowledge of Risk Group 1, 2 and 3 pests, demonstration of inspection techniques, sample selection and knowledge of the inspection requirements of this Manual.

4.9.2 Exporter/Exporter Delegate - Non Compliance

An Exporter/Exporter Delegate may be suspended from the BQA/IHS if they are not

meeting their obligations as detailed in this Manual. Major non-compliance may include:

. failing to provide up to date and correct documentation, including Inspection Records, for New Zealand BQA/IHS product,

. failing to correctly sample and inspect product,

. failing to appropriately train (or be trained) Quality Control inspectors for the purposes of inspecting BQA/IHS product,

. failing to segregate BQA/IHS treated/passed product from non treated product,

. failing to fulfil any other requirement/responsibility as outlined in this Manual.

Additional audits (scheduled by the Senior Inspector (Exports)), will be scheduled where an audit reveals minor non-conformities occurring within the exporter/exporter delegate responsibilities. The exporter/exporter delegate audit costs will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made and agreed to by AQIS.

4.9.3 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

. exporter/delegate inspection records,

. grower pest monitoring records and pest control diaries (commodity specific),

. packer training and associated pest identification,

. premises general hygiene,

. cleanliness of machinery and equipment,

. segregation and identification of produce/products,

. staff responsibilities,

. exporter or exporter delegate performing inspections are competent in carrying out their duties and know correct identification of pests/weed seeds.

Should auditing prove satisfactory and fails to identify any breach of the BQA/IHS arrangement or responsibility under the programme, all parties will be immediately re-instated.

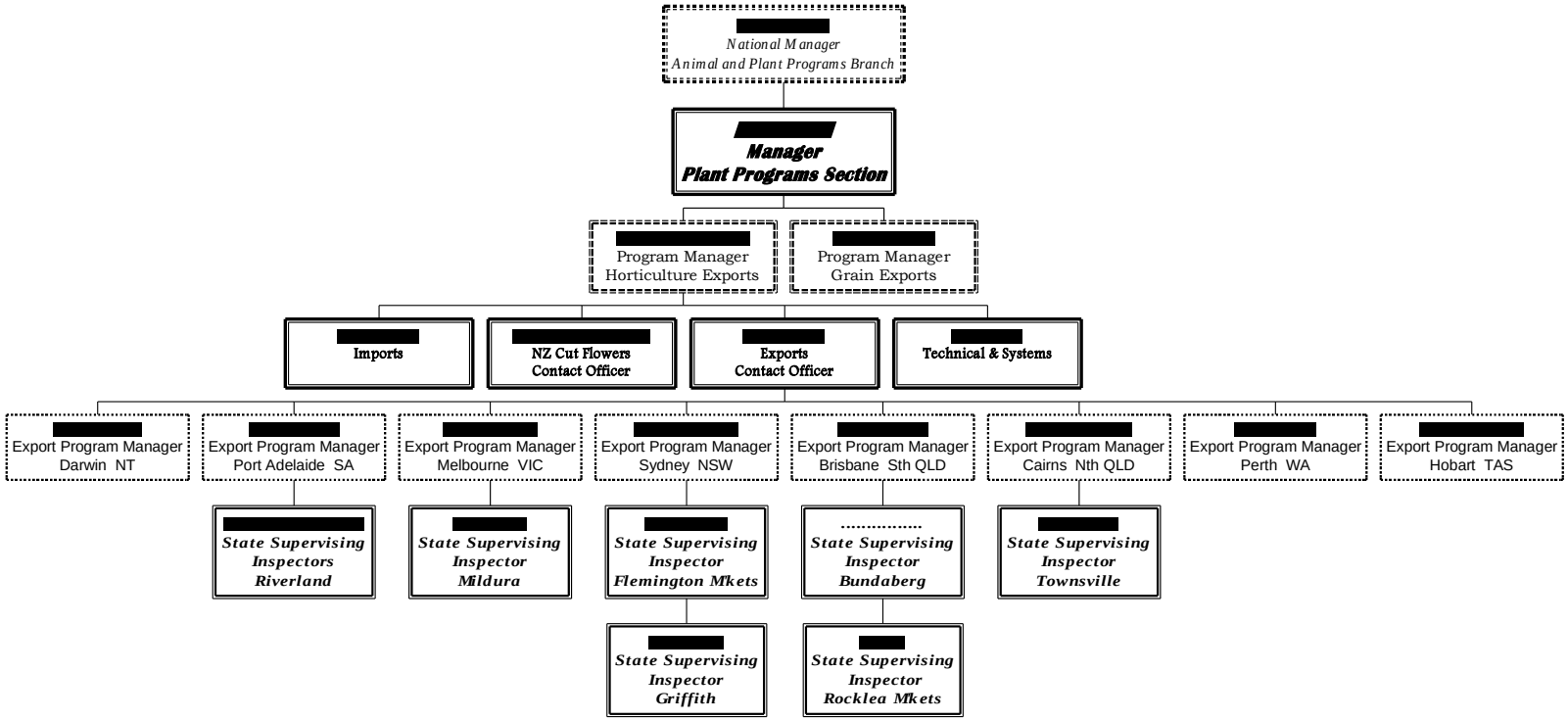
Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the State Senior Inspector (Exports) who will co-ordinate necessary action and advise all parties. Copies of any audit will be given to the relevant components of the pathway audited and kept on file in the State AQIS or Department office.

Inspectors undertaking these audits must be either AQIS AQA, AQIS CA or ISO/CA trained and accredited.

Attachment 1 to Section 4 – AQIS Plant Contact List

AQIS Plant Contact List



SECTION 5. GROWER RESPONSIBILITIES

5.1 Registration

Growers of commodities (excepting southern state citrus growers) for which in-field controls are required must be registered with AQIS for the purpose of exporting those commodities to New Zealand. These commodities include avocadoes, citrus, cucumbers, honeydew melons, scallopinis and watermelons. Growers of zucchinis and rockmelons must also be registered if these commodities are exported to New Zealand under appendix 10 (winter window treatment) to the BQA.

NOTE: for tomatoes, only those growers exporting tomatoes to New Zealand under appendix 4 (dimethoate dip/spray treatment) to the BQA must be registered. This is because only approved tomato varieties can be grown for export to New Zealand under this appendix. Tomato growers must include in their registration application a map showing all blocks in which permitted tomato varieties are grown. Reference to individual blocks on this map will be made on the tomato variety declaration at appendix 3.10 of this manual.

Cucurbit growers that export produce to New Zealand under appendices 8, 9 and 10 to the BQA (section 3.8, 3.9 and 3.10 of this Manual) must be registered with AQIS. Grower registration will include registration of each block/property used to grow the cucurbits. A cucurbit grower declaration form (appendix 3.15 to this Manual) must be completed for each consignment of cucurbits to be treated under appendices 8, 9 and 10 to the BQA.

Growers who must be registered for specific commodities will do so either by making application directly to AQIS or through their packinghouse or exporter. Packinghouses and exporters must forward any grower applications through to AQIS/State Offices for inclusion on the Master List (compiled by AQIS Canberra Office) of growers, approved for the New Zealand trade in that/those commodities that require grower registration.

Packinghouses/exporters who accept application for registration from growers will be responsible for maintaining all information which those growers will need to have in place to ensure compliance with the directions contained in this Manual and for auditing those growers in accordance with the directions contained in this Manual.

5.2 Responsibilities

Growers of those commodities detailed in 5.1 above must maintain spray monitoring diaries and implement field hygiene requirements that demonstrate an appropriate level of management and recording for those pests/contaminants listed as being Quarantine Risk Group 2 in the Pest Lists (as contained at Appendix 2 of this Manual).

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer)—however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the Southern states of New South Wales, Victoria and South Australia are not required to be specifically registered for this program, monitoring and spray diaries must be kept because of the Risk Group 2 pest *Phyllocnistis citrella*.

Growers must register each block or property/ies that they will be using to grow those commodities for which they need to be registered.

Cucurbit growers that export produce to New Zealand under the "**winter window**" field control systems approach must manage registered blocks/properties in accordance with the Queensland Department of Primary Industries Farm note "Cucurbits – recommended pest control programme for export to New Zealand".

Growers are permitted to use the services of AQIS approved crop monitors for the New Zealand BQA/IHS arrangements. Should growers use the services of an AQIS approved crop monitor, the grower must still maintain spray diaries showing implementation of any corrective actions undertaken on the New Zealand registered property/block/commodity.

Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered New Zealand grower that they are undertaking services for.

5.3 Grower Audits

The registering authority (State Department, AQIS, packinghouse or exporter), will undertake grower audits at the following frequency;

. in the initial year of registration,

- before the grower is approved as a New Zealand grower (before harvesting commences) and
- one further audit during the growing season.

. where grower registration is continuous, in subsequent years,

- once during the season.

AQIS audits of grower responsibilities will be conducted simultaneously with packinghouse/exporter audits. All audit time will be charged to either the packinghouse or the exporter.

Cucurbit growers that export produce to New Zealand under the "**winter window**" field control systems approach will be audited more frequently. AQIS will audit blocks/properties and monitoring diaries on a monthly basis.

NOTE: growers will not be charged for audits associated with the New Zealand BQA. All audit charges are to be invoiced to the packinghouse or exporter who is packing/accepting the registered growers' fruits/vegetables, unless another satisfactory arrangement is made between AQIS and the parties involved.

5.3.1 Grower Suspensions

Growers will be suspended from the New Zealand trade if spray and monitoring diaries are not accurately maintained throughout the year or growing season.

All registered growers (excluding growers of tomatoes and southern state citrus) must maintain monitoring and spray diaries of their registered blocks. All activities shall be recorded even where pests are noticed but are of small infestation levels which are deemed inappropriate to control with chemical sprays.

The following considerations may be applied to growers during grower audits;

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

. no pest control or monitoring records,

. bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,

. bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.

. evidence of growers not committed to carrying out the requirements as set out in this Manual,

. no corrective action to control quarantine weeds/seeds or pests and diseases,

5.3.2 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow up audit should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

. inadequate monitoring/spray records,

. insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),

. evidence of quarantine weeds within the property (but not yet seeding). This is of particular relevance to the crops, table grapes and capsicums which are subject to this type of infestation,

. adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days, or a week or so, is dependent on the type of problem and the relationship to growing/harvesting of the current crop. Senior Inspector (Exports) will have to determine whether follow up audits will be required or not.

5.3.3 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced, however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent), to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or their equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for. Such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where, through AQIS packinghouse grower audits it is found that at least three growers are covered by the same crop monitor, and grower audits reveal substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived by the Senior Inspector (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

5.3.4 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

. failure to maintain individual grower records,

. inadequate or incorrect records,

. failure to provide growers with a record of each visit including any recommended pest control measures,

. recommendations to growers to apply non-recommended or unregistered chemicals.

SECTION 6. PACKINGHOUSE RESPONSIBILITIES

Packinghouses that are packing fruits/vegetables for which in-field controls are required must be registered with AQIS for the purpose of exporting those commodities to New Zealand. These commodities include avocadoes, citrus, tomatoes, cucumbers, honeydew melons, scallopinis and watermelons. Packers of zucchinis and rockmelons must also be registered if these commodities are exported to New Zealand under appendix 10 (winter window treatment) to the BQA. Packinghouses that have been delegated, and have accepted, exporter delegate responsibilities must also be registered for this purpose.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal packinghouse registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

Therefore, all packinghouses which are packing fruits/vegetables under the "Area Freedom" treatment (Appendix 2 to the BQA) must be registered for this purpose.

Packinghouses will however, maintain secure conditions for the packing of growers' fruits and will have systems in place to ensure grower identification and segregation of New Zealand fruits is maintained. That is, cross contamination with other commodities or the same commodity for markets other than New Zealand must be minimised.

All cartons of fruits/vegetables for the New Zealand export trade must be marked in some form with a grower and packinghouse identification. It is the exporter's responsibility to ensure that the exporter name and address is on all packages.

Packinghouses must have records identifying produce from each grower that is received, packing details and despatch details for each batch/lot of fruit that is to be certified for New Zealand.

6.1 Grower Registration - Commodity Specific

All packinghouses must provide a list of grower's names and addresses and designated numbers/codes for all suppliers of New Zealand BQA/IHS produce into that packinghouse.

As per Section 3 of this Manual, growers of some commodities will be required to be registered for the purpose of field management controls for pests which are determined to be Quarantine Risk Group 2 pests, or if they are growing commodities for export using the "**winter window**" field control systems approach. Commodity specific pests lists can be found at Appendix 1 to this Manual.

Where a packinghouse is packing fruits/vegetables for which in-field controls are required, all such fruits must only be sourced from registered growers of that commodity.

Growers of citrus fruits, whilst having the Risk Group 2 pest - Citrus leaf miner, will not need to be registered, although they must maintain spray and monitoring diaries for control of this pest.

Growers have the opportunity to make application for registration with AQIS, State Departments of Agriculture (or their equivalents), packinghouses or exporters. Where a grower makes application for registration with a packinghouse, the packinghouse is responsible to ensure:

- that the AQIS State Regional Office is aware of the registration/acceptance, and
- that all grower requirements as detailed at Section 5 of this Manual have/are being complied with, and
- the packinghouse will maintain records detailing audits of the grower property/block registered for the New Zealand BQA/IHS trade.

Packinghouses must have systems in place to ensure incoming produce is identified by grower and for commodities which have Quarantine Risk Group 2 pests that these commodities are segregated from any other fruits to minimise cross contamination of this produce.

6.2 Packinghouse Responsibilities - Commodity Specific

Packinghouses which are packing fruits/vegetables for New Zealand do not need to be specifically registered for the New Zealand export trade unless they are packing commodities requiring in-field controls, packing tomato varieties for export under section 3.4 of this Manual, or have been delegated and accepted duties/responsibilities by exporters.

Packinghouses that are effecting treatments as defined in the BQA or in this Manual must be registered for that purpose.

Therefore, all packinghouses which are packing fruits/vegetables under the "Area Freedom" treatment (Appendix 2 to the BQA), must be registered for this purpose. Similarly, all packinghouses packing commodities for export using the "**winter window**" field control systems approach must be registered to comply with the requirements of Appendix 10 to the BQA.

Packinghouses must ensure that the fruits/vegetables they are packing are free of all quarantine pests as contained in the pest listings at Appendix 1 of this Manual. This means all Risk Groups 1,2 and 3 and any Regulated non plant pests which are listed and are to be certified for on the phytosanitary certificate. Graders, sorters and packers must be trained to be able to recognise all pests and symptoms and to record findings of these pests.

Packinghouses packing BQA/IHS commodities for which they are required to be registered must perform a 600 unit inspection for each grower that makes up a consignment. This inspection does not replace an exporter or exporter delegate inspection for that commodity and must be undertaken regardless of exporter inspection requirements. Records of these inspections must be retained for audit purposes.

To help reduce the possibility of non-approved tomato varieties being inadvertently included in consignments destined for New Zealand, the approved tomato variety must be indicated (eg. stamped) on all export tomato cartons. To further help reduce this possibility, it is recommended that differentiation of export and domestic cartons be implemented. This already occurs in many instances, for example, different trading names/colours are used for domestic and export cartons.

6.3 Inspection Requirements

Where a packinghouse is registered for the New Zealand programme, that packinghouse must undertake grower line inspections for all consignments of New Zealand BQA/IHS produce. These inspections will be carried out using a 600 unit inspection sample for each grower making up the consignment. All inspection results will be recorded as per Inspection Record at Appendix 3.4 of this Manual.

The maximum time that can be run continuously for New Zealand is a 24 hour process. Therefore each daily run must be considered as one lot and all grower inspections must be undertaken on that day. A grower run cannot be continued over into a new day.

For packinghouses located in areas which are declared free of fruit fly, inspection staff must cut any fruits which are considered suspect (soft fruits, bruised or rot spots) and the results of the cutting must be recorded.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

6.3.1 Documentation

Where an exporter has delegated to the packinghouse the exporter inspection requirements, and where that packing establishment requires AQIS to undertake inspection at the establishment, the packinghouse will provide copies of the delegation request and confirmation as required under Section 9.6.

6.4 Security and Supervision Responsibilities

Where a packinghouse has been delegated and accepted exporter responsibilities in accordance with directions contained in Section 9.9 of this Manual the packinghouse must undertake and record all functions so delegated to them and which may include the following;

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and/or Export Permit (EX 28).

6.5 Packinghouse Audits

AQIS will audit all packinghouses involved in BQA/IHS listed commodities for compliance with grower names and addresses and allocated numbers/codes, and as appropriate, training of staff in

the identification of pests associated with the commodity/ies being packed. AQIS will also audit packinghouses to determine compliance with identification, segregation and security of product whilst on the premises. Records pertaining to all the foregoing aspects will be checked for accuracy.

The frequency of audits of packinghouses will be at the discretion of the Senior Inspector (Exports) in each state, but there will be a minimum of one audit per packing season and where seasons are longer than 4 months, it is recommended a second audit should be scheduled for that year.

6.5.1 Application for Registration

An initial audit will be performed prior to the commencement of the season for the purposes of ensuring that the packinghouse has systems in place that will meet the identification, segregation, inspection, security (and where applicable treatments) and recording requirements of the New Zealand BQA/IHS.

At least one additional audit will be undertaken during the packing season.

6.5.2 Continued Registration

At least one audit will be performed during the packing season.

Additional audits may be performed, where as a result of an earlier audit, non-conformances were detected and a reappraisal of the systems following corrective action may be considered necessary.

6.6 Suspension of Packinghouse Registration

AQIS may impose suspension of a packinghouse should the packinghouse be found to not be performing it's responsibilities in the required manner. Depending on the reasons for invoking suspension, such suspension may only affect trade for the New Zealand BQA/IHS and not other markets.

Packinghouses who do not have sufficiently trained staff, appropriate segregation and security and identification procedures, or detailed records of their New Zealand packing arrangements, may be subject to suspension.

SECTION 7. CERTIFICATION ASSURANCE ARRANGEMENTS - PACKINGHOUSE RESPONSIBILITIES

7.1 General Requirements

All fruits/vegetables for the New Zealand export trade must include grower numbers or equivalent codes and packinghouse numbers on each individual package. It is the exporter's responsibility to ensure that the exporter name and address is on all packages.

Packinghouses located in areas declared to be free of fruit flies must have a register of all growers names and addresses and allocated grower numbers for all suppliers of New Zealand BQA/IHS commodities.

Should packinghouses located in fruit fly area freedom districts become involved in area freedom suspension zones, those packinghouses must be able to provide grower registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals must then have procedures for identification, segregation and packing processes to ensure "area free" fruits cannot be contaminated whilst on the establishment and/or surrounds.

It is recommended that packing establishments have contingency plans within their quality manuals to address additional procedures that would be required in the event of fruit fly outbreaks in their district. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

Packinghouses who have Certification Assurance Arrangements with AQIS may incorporate the required New Zealand systems into their Quality Manuals and be audited simultaneously with normal auditing requirements.

Packinghouses which have accredited CA Arrangements in place and who are packing commodities which do not have any Quarantine Risk Group 2 or 3 pests, and are not undertaking official disinfestation treatments, will not need to add any additional systems to their Quality Manuals.

However, packinghouses with CA Arrangements that are packing commodities with Quarantine Risk Group 2 or 3 pests listed will need to ensure that the quality systems, procedures and management ensures, that grower registration, commodity segregation, identification and inspections are performed to meet the New Zealand certification requirements. It is likely that some CA Quality Assurance Manuals will need to either be amended or have attached an Appendix to meet the new export requirements for New Zealand BQA/IHS commodities.

Packinghouses which are seeking CA accreditation for the New Zealand BQA/IHS must have 5 joint inspections (packinghouse – AQIS) to assess the ability of packinghouse inspection staff to undertake inspections for New Zealand in accordance with the directions contained in this Manual and before CA accreditation can be given.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

7.1.1 Auditing for New Zealand Requirements

CA accredited packinghouses who incorporate BQA/IHS commodity responsibilities within their current Quality Manuals will be subject to normal audit regimes which will incorporate any specific New Zealand requirements.

CA accredited packinghouses who wish to leave specific New Zealand BQA/IHS requirements outside their other CA accreditation will have the two systems audited separately but within the usual audit schedules that apply to that establishment.

Packinghouses which have responsibility for registering growers and ensuring adequate field control monitoring and spray diaries are properly maintained for specific Quarantine Risk Group 2 pests, will have a percentage of those registered growers audited at the packinghouse schedule audits to ensure compliance with the New Zealand BQA/IHS is in effect.

Where required, packinghouses who elect to register growers of commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. on initial registration
. following registration at least once during the growing season and
. in subsequent seasons, once during each growing season.

During AQIS CA audits, auditors will perform random audits of growers who are required to be registered under the BQA/IHS on the following basis;

. in the initial year of registration - 5% of all growers registered by the packinghouse
. subject to compliance with all requirements the previous year - reduce to 2 1/2% of all growers registered by the packinghouse or
. if nonconformances were detected at a previous audit - increase random selection of growers to 10% of all registered growers of that packinghouse.

Should a major nonconformance with the New Zealand BQA/IHS and the instructions contained in this Manual be detected at audit, the packinghouse will be suspended from the New Zealand trade in fruit fly host material immediately, and depending on the type of nonconformance, suspension from the AQIS CA Arrangement may be considered. Such a decision will be given through the AQIS CA Contact Officer in that State in conjunction with State Regional Manager and Canberra Office.

7.1.2 CA - New Zealand Inspection Requirements

As most CA Arrangements are based on “in-line” process controls rather than “endpoint” inspection regimes, CA packinghouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted where the CA establishment has systems in place that;

. address grower field controls (horticulture extension officers, reference to crop monitors etc.), and
. have some form of formal receival inspection records, and
. within the processing line have sorter and grader recording systems..

In order to properly document the required inspection for the New Zealand BQA/IHS, CA packinghouses will undertake “in-line” consignment line inspections according to the following;

TABLE 7

DETERMINING SAMPLE REQUIREMENTS
ACCREDITED AQIS CA ESTABLISHMENTS
IN-LINE PROCESS CONTROL

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 7 sets out possible sampling regimes that can be applied as in-line process controls within an accredited CA packing establishment. The maximum time that can be run continuously for New Zealand is a 24 hour process. It is extremely important that records showing this type of in-line process control are maintained for each consignment run for the New Zealand protocol.

All inspections (undertaken as indicated in Table 7) must be undertaken by the Senior Quality Control Officer. Where inspections are performed as per Table 7, these are consignment line inspections and individual grower line inspections are not required.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

Packinghouses can make up any type of sampling system based on the above table but it is important to document exactly what regime is to be used before the production run is commenced and that the sampling regime is representative of the consignment/s being assembled.

The packinghouse requirements covered in Section 6 of this Manual pertaining to identification, segregation, security and records for all New Zealand destined produce must be part of the Quality Assurance Manuals submitted to AQIS for approval.

7.2 Documentation

The identity of the exporter, in addition to the grower and packinghouse numbers will be included on all packages covered by the BQA/IHS.

For all product that is being transferred intrastate or interstate, documentation will be required to ensure that the receiving company and AQIS inspector can verify the security and integrity of a consignment on arrival. A declaration to the following effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not been exceeded."
Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

7.3 Post treatment Security

Where a CA packinghouse has accepted an exporter delegation for the security and loading supervision of BQA/IHS commodities the packinghouse will nominate the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28).

SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES

8.1 Registration

In addition to normal AQIS registration requirements under the Export Control Act, all establishments who undertake either physical or chemical treatments for the disinfestation of fruit flies for export of host commodities to New Zealand, must be registered specifically for this purpose. Application for registration will be made directly to AQIS Regional Offices in the State where registration is required.

8.2 Process Controls

All treatment centres which are registered for the New Zealand BQA trade must have a system of process controls and record keeping which can be audited at all times.

Treatment centres must have systems which demonstrate identification, segregation, process controls, separation of treated and untreated fruits, quarantine secure areas or quarantine secure packaging following treatment and supervision responsibilities when loading produce either direct to export or through exporters/freight forwarders.

Persons who are responsible for calibrating, measuring and recording will be appropriately trained to be able to undertake these responsibilities and understand their importance.

8.3 BQA Treatments - AQIS Supervision

Treatment centres will be subject to the following AQIS supervision during treatments;

8.3.1 Fumigation Centres

Where fumigation is being performed with the use of flexible tents, AQIS inspection staff will attend each fumigation which is being undertaken for the New Zealand BQA. AQIS will attend the treatment centre either at commencement of the treatment to be carried out or prior to the completion of the fumigation. AQIS officers will verify treatment dosages, calculations and gas retention general process controls for each fumigation treatment.

Treatment centres which are using fixed capacity fumigations (chambers or fixed tents), will be audited at the first fumigation treatment being performed for the New Zealand trade and then if substantial compliance is being effected 2 - 3 times during the season.

Fumigation centres must advise their local AQIS office 24 hours in advance of intended fumigation treatments. If it is difficult for AQIS to be in attendance at the required times, arrangements will be made between the treatment centre and the local AQIS office which will enable the treatment to go ahead but define how AQIS will manage the required supervision requirements.

8.3.2 Cold Storage Centres

AQIS inspection staff will undertake supervision of each cold disinfestation treatment. In normal circumstances AQIS will be required to be in attendance when sensors and probes are calibrated, both prior to and at the completion of each treatment. Inspection staff will also attend the cold disinfestation treatment centre once during the disinfestation period (normally about halfway through), to ensure that temperature recording is being maintained in the required manner.

Where cold disinfestation treatments are being undertaken using manual recording devices, AQIS inspection staff will attend for monitoring purpose at that treatment centre every 3-4 days during the treatment/s being undertaken.

8.3.3 Dimethoate Treatments

8.3.3.1 Waxed produce

The application of waxes or oils to produce prior to dimethoate treatment is prohibited for export of produce to New Zealand. The application of waxes or oils to produce which has completed the disinfestation treatment and completely dried will be allowed only at the discretion of the State Senior Inspector (Exports).

8.3.3.2 AQIS requirements

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment, however, AQIS inspection staff will undertake analysis of chemical dipping strengths on the following basis;

. during the first year of a treatment centre registration,

  - each month

. where registration has been continuous and without a nonconformance,

  - twice during the treatment season.

In addition to the above AQIS analysis, treatment centres which perform dimethoate dipping/spraying are required to have a recognised agency analyse the concentration of dimethoate used in their dips/sprays. This will be undertaken monthly during the first 3 months of the treatment season, followed by an additional sample if the treatment season extends for a period of greater than 4 months. Results of these analyses will be retained and made available to AQIS authorised officers upon request.

8.4 AQIS Audits of Treatment Centres

AQIS will conduct audits of treatment centres on the following basis;

Fumigation Centres

One annual audit during the first 10 days of each season (to be conducted during a treatment) to verify that treatment centre operators are trained in their responsibilities and know what information is required to be recorded.

Cold Storage Centres

One annual audit during the first three treatments of each season to verify that all treatment centre responsibilities are being maintained.

Dimethoate Treatment Centres

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season. For treatment centres who have undertaken successful audits in the first year, two audits per year/season thereafter will be undertaken, as long as compliance with the New Zealand requirements is being maintained.

All Treatment Centres

Should non-conformances be detected during the audit schedules covered above, additional audits may be required to ensure corrective actions have been implemented.

Should major non-conformances be detected during audit, the treatment centre may be suspended from the New Zealand BQA/IHS trade until AQIS is satisfied that corrective action has been implemented and that systems are established to ensure that the nonconformance will not reocccur.

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SECTION 9. EXPORTER RESPONSIBILITIES

9.1 Registration Requirements

All exporters of BQA/IHS products to New Zealand must be registered with AQIS for this purpose. Exporter applications will be made to the AQIS State Office where the exporter's business is conducted.

Applications for registration will include details of the commodities and treatment pathways (where it is known) that the exporter intends to use to meet with the conditions stipulated for export of those commodities to New Zealand.

If details of treatment centres are not known at the time when an application for registration is made, AQIS will accept the application, but exports of the particular commodities will not be permitted until the exporter provides AQIS with the details of the treatment centres for those commodities covered in the application for registration.

9.2 Exporter Responsibilities

Whilst exporters can delegate some duties, the exporter will remain responsible for all activities which pertain to the inspection, security and loading of product following treatment.

Exporters must ensure at all times:

. either directly or by delegation, that product security during loading, transporting and export consignment consolidation is not compromised and that there can be no substitution or cross infestation of product following treatment,

. that exporters inspection requirements (either exporter or exporter delegate) as detailed in this Manual are performed by staff that are qualified to do so, and that records are kept for all inspections performed,

. that inspection records are given for each grower lot presented for AQIS inspection,

. that liaison with AQIS/State Officers takes place as necessary to advise of product movement and inspection requirements,

. all documentation, including phytosanitary certificate endorsements that are required for product to enter New Zealand, are maintained.

9.3 Exporter Inspection

Where grower line inspections are performed by the exporter, full details of the inspection performed will be recorded.

Inspections will only be undertaken following completion of the disinfestation treatments.

NOTE: all exporter inspections must be undertaken at an appropriate sampling rate, as given in Section 2 of this manual.

Exporters will ensure that all staff undertaking inspection duties are properly trained in pest and weed seed identification for the pests and weedseeds which are of a quarantine concern to New Zealand.

During exporter inspections, any soft, bruised or rot spot fruits will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, that all larvae are dead. The results of all fruits which are cut will be recorded on the inspection sheets.

A copy of the "Inspection Record" together with other documentation relating to the shipment will be held on file for 2 years and be subject to AQIS/MAF audit.

9.4 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections, exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any that may not have been forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

Each such procedure must have AQIS approval before implementation.

NOTE: the "split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has approved that the necessary documentation and record keeping is satisfactory and auditable.

This procedure will allow one inspection at the fee for service rate and the first phytosanitary certificate free. All subsequent phytosanitary certificates, both originals or certified copies, will be charged for at the rate determined in the Fees Orders.

For split consignments where exporters/importers want to reduce the MAF on arrival inspection, exporters must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

. notification of consignment details to MAF as they occur,

. the New Zealand communication links (importer and MAF contacts),

. flow chart detailing how the phytosanitary certificate moves through the system.

9.5 Untreated Produce being forwarded from Country Areas

Growers/Packinghouses who are forwarding untreated Risk Group 2 fruits from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate, signed by an authorised AQIS officer), or a signed copy of an EX 28 Notice of Intention to Export or, a grower declaration form, attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide Notice of Intention to Export (EX 28) and any other relevant documentation to AQIS, prior to any AQIS inspection being undertaken.

9.6 Delegation of Inspection

Where responsibility for the export inspection is delegated to another party, this will be done in writing with the delegate acknowledging in writing, their responsibilities in so accepting the delegation. Copies of documentation for delegation and acceptance of these duties will be held on both companies filing systems.

Where the exporter has delegated the exporter inspection requirements, the delegated inspection person will perform individual 600 unit (or equivalent) consignment line inspections regardless of any "in-line quality control" inspections that may have been undertaken and recorded.

NOTE: accredited AQIS CA establishments are not required to undertake end-point inspections where their quality systems give procedures for a 600 unit inspection to be completed in-line and where the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

Any person/s who are delegated the responsibility for undertaking exporter inspections must have the ability to identify those pests and weedseeds that are of a quarantine concern to New Zealand.

All inspections, whether by exporter staff or delegated persons, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10 where appropriate.

Inspection procedures must include cutting of damaged fruits as detailed at Section 9.3 of this Manual. Records of all fruits/vegetables cut will be recorded on the inspection sheets.

All inspections performed by an exporter or delegated persons will be recorded on an "Inspection Record" and held on file by that exporter/delegate. A copy of this record must be presented with the line/lot for AQIS inspection.

9.7 Documentation

The identity of the exporter, in addition to the grower and packinghouse numbers, will be included on all packages covered by the BQA/IHS.

A declaration to this effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not been exceeded."

9.8 Procedures for Exporter Rejected Produce

If live fruit fly is found during an exporter or exporter's delegate inspection of any grower lot, all produce from that grower lot (even if previously passed but not shipped) will be securely segregated from all other New Zealand BQA produce, and will be identified as not suitable for export to New Zealand.

The exporter or exporter's delegate is responsible for immediately notifying the AQIS officers in the region of the detection, the grower involved and details of the treatment centre who performed the disinfestation treatment (for treated produce only). The exporter or exporter's delegate must also advise the AQIS officers of what action they are taking to ensure there is no cross contamination of other BQA/IHS produce.

AQIS Senior Inspector (Exports) in that State will formally advise the treatment centre of the possible treatment failure and that the centre will be suspended pending an audit of the treatment. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the detection of live fruit fly, reinstatement of the treatment centre for the New Zealand trade may be permitted.

Should during exporter inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS officers in that region of the detection. The fruit must be immediately identified as failed for export to New Zealand and segregated from all other New Zealand destined fruits/vegetables.

AQIS inspection staff must notify the grower of this produce of the failure and the grower will be placed on suspension and subject to an audit of his property to learn the reason for failure. If the audit identifies nonconformances but which can be corrected immediately, consideration will be given to allow the grower to take those corrective actions and be reinstated for the New Zealand program.

9.9 Post treatment Security

An exporter will nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on their premises,
- supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,
- documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28) and is to be faxed through to the AQIS office in the originating area/location.

9.10 Security of Produce - Exporter/Freight Forwarder Premises

Treated produce, on arrival at an exporter's premise or Freight Forwarder Depot, will be inspected by AQIS officers to ensure that the security of the consignment is intact. Inspectors will ensure that the produce is in a secure/safe condition (no tearing of shrinkwrap or mesh bags). Documentation must correspond with the contents of the load, and if required, a treatment certificate must be present.

Export shipping or airfreight containers will be inspected by freight forwarding agent or exporter for cleanliness and condition (any holes in containers will be taped over). Details of container, and its soundness and cleanliness will be recorded on "Container Report Sheet" Appendix 3.12 and signed by the Exporter/Airfreight Forwarding Agent.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

9.11 Audits - Exporters

AQIS will perform an annual audit of all exporters registered for the New Zealand program. All relevant documentation for all consignments must be made available to the AQIS authorised Officer.

9.12 Audits -Exporter's Delegate

A minimum of two audits per year will be conducted by AQIS on persons with exporter delegate responsibilities.

9.13 Exporter/Exporter Delegate - Non Compliance

An exporter/exporter delegate may be suspended from the New Zealand program if they are not meeting their obligations under the BQA/IHS. Non-compliance includes:

- failing to provide up to date and correct documentation, including Inspection Records for New Zealand destined product
- failing to correctly draw and sample product
- failing to appropriately train (or be trained), Quality Control inspectors for the purposes of inspecting BQA/IHS product
- failing to segregate BQA/IHS treated/passed for export product from non treated product
- failing to fulfil any other requirement/responsibility as outlined in this section of the Manual.

Additional audits (scheduled by the Senior Inspector (Exports)) will be scheduled where an audit reveals non-conformities occurring within the exporter/exporter delegate responsibilities

The exporter/exporter delegate audit costs will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made between AQIS and the parties involved.

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SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES

10.1 Fruit Fly Area Freedom - Management Requirements

10.1.1 Area Freedom - Fruit Flies

For the purpose of the BQA/IHS Arrangement, area freedom from fruit flies is recognised as a treatment. All components of the appendices under the Arrangement are applicable to produce grown in areas free of fruit flies with the treatment being area freedom rather than fumigation, cold disinfestation, etc. Areas considered to be free of fruit flies, unless a current outbreak is declared in the area are;

. Tasmania
. Riverland area of South Australia surrounding the towns/cities of Murtho Renmark, Loxton, Berri, Barmera, Waikerie, Cadell and the township of Mypolonga.
. Sunraysia District of Victoria surrounding the towns/cities of Mildura, Merbein, Nangiloc/Colignan, Robinvale, Nyah and Nyah West, Swan Hill and Barham
. Sunraysia districts of New South Wales surrounding the towns of Dareton, Curlwaa and Coomealla,
. Murrumbidgee Irrigation Area of New South Wales including the towns/cities of Griffith, Leeton and Hillston.

10.1.2 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Surveys to demonstrate that the areas are fruit fly free.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of Fruit Flies and managed under the Tri-state agreement between the States of New South Wales, Victoria and South Australia and

- which reflect the requirements of New Zealand NASS Standard 158.03.06., the Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

- management and control procedures for each area which have been submitted to and accepted by MAF as meeting all the requirements (or equivalence) with the New Zealand NASS Standard 158.03.06.

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. These procedures and controls are documented such that they can be readily demonstrated to, and audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

10.1.3 Outbreak

Area freedom will be assumed, unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. one or more larvae or pupae are found in locally grown fruit, or
. two male fruit flies are trapped within 400 metres of each other, within a 14-day period, or
. a single female fly is trapped.

In this case, area freedom from fruit flies will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of NASS Standard 158.03.06, the suspension period will be reduced to;

  - one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site or 30kms should there be two outbreak sites within 3 kms.

State Departments must advise AQIS Canberra Office of any amendments to their management procedures immediately they are intended to be implemented. Canberra Office will forward amendments to these management documents to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (and at least annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable New Zealand NASS Standard 158.03.06.

This Manual at Appendix 2 lists dates of declaration of outbreaks and corresponding generation dates to assess subsequent reinstatement of area freedom for areas which are subjected to outbreak conditions.

10.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom from fruit flies has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency of all traps will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS

11.1 Redback Spiders - *Lactrodectus hasselti*

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern, and have requested MAF to ensure that all consignments of tablegrapes arriving in New Zealand do not have any live pests of this type.

MAF have directed that AQIS must undertake either stringent field control programs to eliminate this pest in the field or undertake an agreed treatment that is effective against red back spiders. A sulphur dioxide - carbon dioxide fumigation treatment has been accepted for this purpose.

The Australian tablegrape industry have opted for mandatory fumigation.

Fumigation details are;

A mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

Fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Section 3 of this Manual details the requirements and responsibilities which fumigation treatment centres must comply with, and fumigation applied to tablegrapes must meet the listed criteria.

For the phytosanitary certification of tablegrapes, AQIS inspection staff must sight fumigation treatment records. These records must clearly identify the product treated, the date of treatment and the dosage rate and application time of the fumigant. The records must also provide exporter details (where known) packing establishment and grower number details.

Tablegrape fumigators will be audited for compliance with this Section and Section 3 of this Manual.

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APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

Growers and packinghouses must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

-
-
-
avocado sun blotch viroid

1.1 Avocado, *Persea americana*

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug

1.1 Avocado, *Persea americana*

Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth

Thysanoptera
Thripidae
Selenothrips rubrocinctus redbanded thrips

Mite

Arachnida
Acarina
Tetranychidae
Oligonychus coffeae tea red spider mite

Fungus

Ascomycota
Phyllachorales
Phyllachoraceae
Glomerella cingulata anthracnose
(anamorph *Colletotrichum gloeosporioides*)
Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

1.1 Avocado, *Persea americana*

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	-

Non-regulated non plant pests/organisms

None

BANANA

Musa spp.

The export of Bananas to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera jarvisi	Javis' fruit fly
Bactrocera papayae	papaya fruit fly
Bactrocera tryoni	Queensland fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) are allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Chrysomelidae	
Geloptera miracula	chrysomelid beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida discopunctulata	leaf beetle
Curculionidae	
Cosmopolites sordidus	banana root borer
Listroderes difficilis	vegetable weevil
Polytus mellerborgi	weevil borer
Scarabaeidae	
Dermolepida albohirtum	greyback cane beetle
Rhopaea magnicornis	large pasture scarab
Diptera	
Muscidae	

Atherigona orientalis	muscid fly
Calliphoa imperialis	blow fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Fabrictilis australis	squash bug
Lygaeidae	
Graptostethus servus	lygaeid bug
Homoptera	
Aleyrodidae	
Aleurodicus spiniferis	coconut whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophyllis	cyanophyllum scale
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Pseudococcidae	
Planococcus pacificus	citrus mealybug
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Lepidoptera	
Lymantriidae	
Orgyia australis	vapourer moth
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Helicoverpa assulta	cape gooseberry budworm
Hermimia cenoealis	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Lamprosema octasema	banana scab moth
Tirathaba rufivena	fruit borer
Tineidae	
Opogona glycyphaga	sugarcane bud moth
Torticidae	
Isotenes miserana	orange fruitborer
Xenothictis sciaphila	tortricid
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust

Thysanoptera	
Thripidae	
Chaetanaphothrips signipennis	banana rust thrips
Thrips florum	flower thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phyllocoptruta musae	eriophyid mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Tetranychus marianae	bean mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia musae (anamorph *Phyllostict musae)*	-
Phyllachorales	
Phyllachoraceae	
Phyllachora musicola	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis musicola	-
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora hayi	-
Deightoniella torulosa	-
Moniliaceae	
Verticillium theobromae	-
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora palmivora	phytophthora fruit rot

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Insect
- **Insecta**
  - **Coleoptera**
    - **Scarabaeidae**
      - *Heteronychus arator* — black beetle
  - **Homoptera**
    - **Coccidae**
      - *Coccus hesperidum* — brown soft scale
    - **Diaspididae**
      - *Aspidiotus nerii* — oleander scale
      - *Hemiberlesia lataniae* — latania scale
      - *Pinnaspis aspidistrae* — fern scale
    - **Pseudococcidae**
      - *Planococcus citri* — citrus mealybug
  - **Lepidoptera**
    - **Noctuidae**
      - *Chrysodeixis eriosoma* — green garden looper
      - *Spodoptera litura* — cluster caterpillar
  - **Thysanoptera**
    - **Thripidae**
      - *Hercinothrips bicinctus* — banana silvering thrips

Mite
- **Arachnida**
  - **Acarina**
    - **Tarsonemidae**
      - *Polyhagotarsonemus latus* — broad mite
    - **Tenuipalpidae**
      - *Brevipalpus californicus* — bunch mite
      - *Brevipalpus phoenicis* — passionvine mite
    - **Tetranychidae**
      - *Tetranychus lambi* — strawberry spider mite
      - *Tetranychus urtiae* — twospotted spider mite

Fungus
- **Ascomycota**
  - **Microascales**
    - **Unknown Microascales**
      - *Ceratocystis paradoxa* (anamorph *Chalara paradoxa*)
  - **Unknown Ascomycota**
    - **Magnaporthaceae**
      - *Magnaporthe grisea* (anamorph *Pyriculara grisea*)

Non-regulated non plant pests/organisms

None

CAPSICUM
Capsicum annuum

Capsicums can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 4 (dimethoate treatment) to the BQA/IHS.

Although Risk Group 2 pests are listed, grower/packhouse registration is not required for capsicums. AQIS can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the BQA) would also control *B. bryoniae* should it occur.
4. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. If by chance *B. tabaci* were present on harvested capsicum fruit as a hitch-hiker, the pre-export dimethoate spray treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
5. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
6. Historical records show that *B. tabaci* has never been detected on capsicum fruit during AQIS pre-export inspection.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested capsicum fruit, the pre-export dimethoate spray treatment (appendix 4 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on capsicum fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

1.3 Capsicum, *Capsicum annuum*

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci [strain]	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug

1.3 Capsicum, *Capsicum annuum*

Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum [strain]	greenhouse whitefly
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Lepidoptera	
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips
Fungus	
Ascomycota	
Erysiphales	
Erysiphaceae	
Leveillula taurica (anamorph *Oidiopsis sicula*)	powdery mildew
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata var. *minor*	anthracnose
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora capsici	cercospora spot
Oomycota	
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Pythiales	
Pythiaceae	
Phytophthora capsici	buckeye rot
Pythium sp.	root rot
Virus	
-	
-	

-	
impatiens necrotic spot tospovirus [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Weed

Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Xanthium spp. (except *X. spinosum*)	bur
Crassocephalum crepidiodes	thickhead
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta
- **Hemiptera**
  - **Pentatomidae**
    - *Nezara viridula* — green vegetable bug
- **Homoptera**
  - **Aphididae**
    - *Aphis gossypii* — cotton aphid
- **Lepidoptera**
  - **Gelechiidae**
    - *Phthorimaea operculella* — potato tuber moth
  - **Noctuidae**
    - *Chrysodeixis eriosoma* — green garden looper
    - *Helicoverpa armigera* — tomato fruitworm
    - *Spodoptera litura* — cluster caterpillar
  - **Pyralidae**
    - *Sceliodes cordalis* — poroporo fruit borer

Mite

Arachnida
- **Acarina**
  - **Tarsonemidae**
    - *Polyphagotarsonemus latus* — broad mite
  - **Tetranychidae**
    - *Tetranychus urticae* — twospotted spider mite

Fungus

Ascomycota
- **Diaporthales**
  - **Valsaceae**
    - *Diaporthe phaseolorum* (anamorph *Phomopsis phaseoli*) — phomopsis stem rot
- **Dothideales**
  - **Mycosphaerellaceae**
    - *Mycosphaerella tassiana* (anamorph *Cladosporium herbarum*) — black leaf spot
- **Hypocreales**
  - **Hypocreaceae**
    - *Gibberella fujikuroi* (anamorph *Fusarium fujikuroi*) — fusarium rot
    - *Gibberella intricans* (anamorph *Fusarium equiseti*) — root and stem dry rot
    - *Nectria haematococca* (anamorph *Fusarium solani*) — fusarium fruit rot
- **Leotiales**

1.3 Capsicum, *Capsicum annuum*

Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot

1.3 Capsicum, *Capsicum annuum*

Bacterium

-

-

Enterobacteriaceae

Erwinia carotovora subsp. *carotovora*	bacterial soft rot

Pseudomonadaceae

Ralstonia solanacearum	bacterial wilt
Xanthomonas campestris pv. *vesicatoria*	bacterial spot

Weed

Angiospermae

Poales

Poaceae

Pennisetum macrourum	African feather grass
Echinochloa spp	wild rice/millet
Eleusine indica	Crowsfeet grass

Caryophyllales

Amaranthaceae

Amaranthus spp

Asterales

Asteraceae

Sonchus spp	Milk thistle

Non-regulated non plant pests/organisms

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Pest Scientific Name	Common Name
Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa	-

(anamorph *Phyllosticta citricarpa*)

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	

Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper

Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite

Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips

Thrips tabaci	onion thrips

Mite

Arachnida
Acarina

Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non plant pests/organisms

None

CUCUMBER

Cucumis sativus

Cucumbers can be exported to New Zealand under appendices 2 (fruit fly area freedom), 8 (dimethoate treatment) and 10 (winter window) to the BQA/IHS.

Appendix 8 to the BQA requires both in-field controls and post-harvest chemical treatment, while appendix 10 to the BQA requires in-field controls only. Grower/packhouse registration is required for cucumbers exported to New Zealand under both these appendices.

A number of Risk Group 2 pests have been listed for cucumbers. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested cucumber fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 8 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 10 (winter window treatment) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested cucumber fruit, the pre-export dimethoate dip treatment (appendix 8 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 10 (winter window treatment) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 8 and 10 to the BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Cucumbers exported to New Zealand under appendix 8 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci [strain]	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

1.5 Cucumber, *Cucumis sativus*

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm

1.5 Cucumber, *Cucumis sativus*

Orthoptera	
Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Fungus	
Ascomycota	
Erysiphales	
Erysiphaceae	
Leveillula taurica (anamorph *Oidiopsis sicula*)	powdery mildew
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata var. *minor*	anthracnose
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cladosporium cucumerinum	--
Moniliaceae	
Botrytis sp.	grey mould
Verticillium albo-atrum [severe strain]	progressive wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	

1.5 Cucumber, *Cucumis sativus*

Choanephora cucurbitarum	blight

Virus

-

-

-

tomato spotted wilt tospovirus [strain] [VO]	-

Undetermined quarantine status

Insect
Insecta
Coleoptera
Scarabaeidae

Phyllophaga sp.	crown girdler

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

1.5 Cucumber, *Cucumis sativus*

Mite	
Arachnida	
Acarina	
Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite
Fungus	
Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot

1.5 Cucumber, *Cucumis sativus*

Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	

1.5 Cucumber, *Cucumis sativus*

Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests/organisms

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterrranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Nil

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Alteica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorihinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Scarabaeidae	

Dilochrosis atripennis	flower chafer
Diphucephala spp.	green scarab beetles
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhococidae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Hymenoptera	
Formicidae	
Componotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	leafrollers
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips

Mite

Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite

Weed

Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Xanthium spp. (except *X. spinosum*)	bur
Crassocephalum crepidiodes	thickhead
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Spider

Arachnida	
Araneae	
Theridiidae	
Lactrodectus hasselti	Australian red-back spider

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Coccus persicae	grapevine scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Tortiricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothritps haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Colomerus vitis	grape erineum mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus urticae	twospotted spider mite

Weed

Angiospermae
Poales
Poaceae

Pennisetum macrourum	African feather grass
Echinochloa spp	wild rice/millet
Eleusine indica	Crowsfeet grass

Caryophyllales
Amaranthaceae
Amaranthus spp

Asterales
Asteraceae

Sonchus spp	Milk thistle

Non-regulated non plant pests/organisms
None

MANGO
Mangifera indica

The export of Mango to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Aspidiotus destructor	coconut scale
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Ischnaspis longirostris	black thread scale
Phenacaspis dilatata	mango scale
Flatidae	
Colgaroides acuminata	mango planthopper
Lepidoptera	
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Penicillaria jocosatrix	mango shoot caterpillar
Peperita euthysticha	mango tipborer
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Regulated non-quarantine pests

None

Regulated non-plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Sternochetus mangiferae	mango seed weevil
Homoptera	
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite

Non-regulated non plant pests/organisms

None

MELON

Cucumis melo

Rockmelon can be exported to New Zealand under appendices 2 (fruit fly area freedom), 4 (dimethoate treatment) and 10 (winter window) to the BQA/IHS.

Honeydew melon can be exported to New Zealand under appendices 2 (fruit fly area freedom), 8 (approved dimethoate treatment) and 10 (winter window) to the BQA/IHS.

Appendix 8 to the BQA requires both in-field controls and post-harvest chemical treatment, while appendix 10 to the BQA requires in-field controls only. Grower/packhouse registration is required for melons exported to New Zealand under both these appendices.

A number of Risk Group 2 pests have been listed for melons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 or 8 to the BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 10 (winter window) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 or 8 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 10 (winter window) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 8 and 10 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendices 4 and 8 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatment

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci [strain]	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	

Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Fungus	
Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	-
Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight
Bacterium	
-	
-	
Pseudomonadaceae	
Acidovorax avenae subsp. *citrulli*	bacterial rot

1.8 Melon, *Cucumis melo*

Undetermined quarantine status

Insect

Insecta
Coleoptera
Scarabaeidae

Phyllophaga sp.	crown girdler

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips
Mite	
Arachnida	
Acarina	

Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus
Ascomycota

Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata (anamorph *Fusarium lateritium*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot

Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichu (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	

Rhizopus stolonifer	rhizopus soft rot

Bacterium

-

-

Pseudomonadaceae

Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests/organisms

None

PAPAYA
Carica papaya

The export of Papaya to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha suspensa	Caribbean fruit fly
Bactrocera cucurbitae	melon fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Homoptera	
Cicadellidae	
Orosius argentatus	brown leafhopper
Diaspididae	
Aonidiella orientalis	oriental yellow scale
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

1.9 Papaya, *Carica papaya*

Mite

Arachnida
Acarina
Tetranychidae

Tetranychus desertorum	desert spider mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus phoenicis	passionvine mite

Non-regulated non plant pests/organisms

None

PINEAPPLE

Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarnatine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale

Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla	
Unknown Symphyla	
Symphylidae	
Hanseniella sp.	symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetes	
Dematiaceae	
Thielaviopsis paradoxa	
Moniliaceae	
Penicillium funiculosum	

Bacterium

-	
-	
Enterobacteriaceae	

Erwinia ananas	marbling of fruit

Virus

-	
-	
-	
mealybug wilt closterovirus	-

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta	
Hymenoptera	
Formicidae	
Iridomyrmex glaber	black house ant
Paratrechina vaga	ant
Tapinoma sp.	ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin's flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps
Mite	
Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite
Nematode	
Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora cinnamomi	-

Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus

-	
-	
-	
tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	**Common Name**
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

POMEGRANATE
Punica granatum

Growers and packinghouses of pomegranate do not need to be specifically registered for the New Zealand program requirements.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Hemiptera	
Lygaeidae	
Oxycarenus arctatus	coon bug
Homoptera	
Aphididae	
Aphis spiraecola	spirea aphid

1.11 Pomegranate, *Punica granatum*

Lepidoptera
Pyralidae
Ectomyelois sp. carob moth

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Aphididae	
Aphis gossypii	cotton aphid
Aulacorthum circumflexum	mottled arum aphid
Myzus ornatus	ornate aphid
Myzus persicae	green peach aphid
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus spp.	spider mites

Non-regluated non plant pests/organisms

None

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil

Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

1.12 Strawberry, *Fragaria* spp.

Myriapod

Diplopode
Julida
Blaniulidae
Blaniulua guttulatus — spotted snake millipede

Mollusc

Gastropoda
Stylommatophora
Helicidae
Helix aspersa — common garden snail
Limacidae
Deroceras panormitanum — brown field slug
Deroceras reticulatum — grey garden slug
Milax gagates — black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Tomatoes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 4 (dimethoate treatment) to the BQA/IHS.

Only the tomato varieties, Floradade, Tristar, Hayslip, Sunny and Duke can be exported under the Dimethoate Treatment Appendix No. 4 to the BQA/IHS. Growers and packhouses that are growing/packing tomatoes for export to New Zealand under appendix 4 to the BQA must be registered for this purpose.

Tomatoes supplied under the Area Freedom Treatment Appendix No.2 of the BQA/IHS can be of any variety, but the variety name should be included on the phytosanitary certificate.

A number of Risk Group 2 pests have been listed for tomatoes. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested tomato fruit as a hitch-hiker, the pre-export dimethoate spray/dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on tomato fruit during AQIS pre-export inspection.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested tomato fruit, the pre-export dimethoate spray/dip treatment (appendix 4 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on tomato fruit during AQIS pre-export inspection.

Bactrocera bryoniae, Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. bryoniae* and *B. musae* should they occur.
3. Pre-export application of dimethoate spray to tomatoes (appendix 4 to the BQA) would also control *B. bryoniae* and *B. musae* should they occur.
4. Pre-export inspection of fruit will identify the presence of both *B. bryoniae* and *B. musae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that both *B. bryoniae* and *B. musae* have never been detected on tomato fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insect	
Insecta	
Tephritidae	
Bactrocera bryoniae	
Bactrocera musae	
Homoptera	
Aleyrodidae	
Bemisia tabaci [strain]	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

1.13 Tomato, *Lycopersicon esculentum*

Insect

Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	
Antherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Gelechiidae	
Phthorimaea operculella [strain]	potato tuber moth
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm

1.13 Tomato, *Lycopersicon esculentum*

Fungus

Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite

Tetranychus urticae	twospotted spider mite
Fungus	
Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot

1.13 Tomato, *Lycopersicon esculentum*

Zygomycota: Zygomycetes
Mucorales
Mucoraceae

Rhizopus stolonifer	rhizopus soft rot

Non-regulated non plant pests/organisms

None

WATERMELON

Citrullus lanatus

Watermelons can be exported to New Zealand under appendices 2 (fruit fly area freedom), 9 (methyl bromide fumigation treatment) and 10 (winter window treatment) to the BQA/IHS.

Appendix 9 to the BQA requires both in-field controls and post-harvest chemical treatment, while appendix 10 to the BQA requires in-field controls only. Grower/packhouse registration is required for watermelons exported to New Zealand under both these appendices.

A number of Risk Group 2 pests have been listed for watermelons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 9 to the BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 10 (winter window) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 9 to the BQA) would kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 10 (winter window) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 9 and 10 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 9 to the BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci [strain]	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

1.14 Watermelon, *Citrullus lanatus*

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	
Gryllidae	
Acheta spp.	crickets

Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata var. *minor*	anthracnose
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium spp.	pythium rot

Bacterium

-	
-	
Enterobacteriaceae	
Erwinia tracheiphila	bacterial wilt
Pseudomonadaceae	
Acidovorax avenae subsp. *citrulli*	bacterial rot

Undetermined quarantine status

Insect

Insecta	
Coleoptera	
Scarabaeidae	
Phyllophaga sp.	crown girdler

Regulated non-quarantine pests

1.14 Watermelon, *Citrullus lanatus*

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae

Solenopsis geminata	fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta
- **Coleoptera**
  - **Curculionidae**
    - *Asynonychus cervinus* — Fuller's rose weevil
    - *Listroderes obliquus* — vegetable weevil
    - *Naupactus leucoloma* — whitefringed weevil
- **Collembola**
  - **Sminthuridae**
    - *Bourletiella hortensis* — garden springtail
    - *Sminthurus viridis* — lucerne flea
- **Dermaptera**
  - **Forficulidae**
    - *Forficula auricularia* — European earwig
- **Diptera**
  - **Anthomyiidae**
    - *Delia platura* — seedcorn maggot
- **Hemiptera**
  - **Pentatomidae**
    - *Nezara viridula* — green vegetable bug
- **Homoptera**
  - **Aleyrodidae**
    - *Trialeurodes vaporariorum* — greenhouse whitefly
  - **Aphididae**
    - *Aphis craccivora* — cowpea aphid
    - *Aphis gossypii* — cotton aphid
    - *Aulacorthum solani* — foxglove aphid
    - *Lipaphis erysimi* — turnip aphid
    - *Macrosiphum euphorbiae* — potato aphid
    - *Myzus persicae* — green peach aphid
    - *Rhopalosiphum maidis* — corn leaf aphid
    - *Rhopalosiphum rufiabdominalis* — rice root aphid
    - *Toxoptera aurantii* — black citrus aphid
- **Lepidoptera**
  - **Noctuidae**
    - *Chrysodeixis eriosoma* — green garden looper
    - *Helicoverpa armigera* — tomato fruitworm
    - *Spodoptera litura* — cluster caterpillar
- **Thysanoptera**
  - **Thripidae**
    - *Frankliniella occidentalis* — western flower thrips
    - *Thrips tabaci* — onion thrips

Mite

Arachnida

Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite
Fungus	
Ascomycota	
Dothideales	
Pleosporaceae	
Leptosphaerulina trifolii	seed rot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	

1.14 Watermelon, *Citrullus lanatus*

Phoma exigua	phoma rot
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew

Bacterium

-	
-	
Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests/organisms

None

ZUCCHINI & SCALLOPINI

Cucurbita pepo

Zucchinis can be exported to New Zealand under appendices 2 (fruit fly area freedom), 4 (dimethoate treatment) and 10 (winter window treatment) to the BQA/IHS.

Scallopinis can be exported to New Zealand under appendices 2 (fruit fly area freedom), 8 (approved dimethoate treatment) and 10 (winter window treatment) to the BQA/IHS.

Appendix 10 to the BQA requires in-field controls. Grower/packhouse registration is required for zucchinis exported to New Zealand under this appendix.

A number of Risk Group 2 pests have been listed for zucchinis. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested zucchini fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on zucchini fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to zucchini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 10 (winter window) to the BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Zucchinis exported to New Zealand under Appendix 4 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci [strain]	sweet potato whitefly
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Promecotheca bryanti	-
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	

Graphognathus peregrinus	weevil
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Pseudaulacaspis pentagona	white peach scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Tiracola plagiata	banana fruit caterpillar
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida
Acarina
Acaridae

Tyrophagus dimidiatus	mushroom mite

Tetranychidae

Bryobia spp.	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Fungus	
Ascomycota	
Erysiphales	
Erysiphaceae	
Leveillula taurica (anamorph *Oidiopsis sicula*)	powdery mildew
Hypocreales	
Hypocreaceae	
Nectria sp.	canker
Mitosporic Fungi (Hyphomycetes)	
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight
Virus	
-	
-	
-	
tobacco ringspot nepovirus [strain] [VO]	-
Phytoplasma	
-	
-	
-	
tomato big bud phytoplasma	-

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Undetermined quarantine status

Insect

Insecta
Coleoptera
Scarabaeidae
Phyllophaga sp. — crown girdler

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae
Solenopsis geminata — fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Stratiomyidae	
Inopus rubriceps	Australian soldier fly
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Diaspididae	
Aspidiotus nerii	oleander scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Heliothrips haemorrhoidalis	greenhouse thrips
Parthenothrips dracaenae	palm thrips

Mite

Arachnida
Acarina
Acaridae

Tyrophagus putrescentiae	mould mite

Eupodidae

Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tetranychidae

Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Unknown Dothideales

Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot

Erysiphales
Erysiphaceae

Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew

Hypocreales
Hypocreaceae

Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould

Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Microascales	
Unknown Microascales	
Ceratocystis paradoxa (anamorph *Chalara paradoxa*)	ceratocystis rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot

Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Ralstonia solanacearum	bacterial wilt
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests/organisms
None

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1.15 Zucchini & Scallopini, *Cucurbita pepo*

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT

DAY LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	01 - Feb	01 - Mar	05 - Mar	27 - Apr
02 - Jan	02 - Feb	02 - Mar	06 - Mar	03 - May
03 - Jan	03 - Feb	03 - Mar	07 - Mar	05 - May
04 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
05 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
06 - Jan	05 - Feb	05 - Mar	09 - Mar	16 - May
07 - Jan	06 - Feb	06 - Mar	11 - Mar	19 - Sep
08 - Jan	07 - Feb	07 - Mar	13 - Mar	25 - Sep
09 - Jan	08 - Feb	08 - Mar	14 - Mar	30 - Sep
10 - Jan	09 - Feb	09 - Mar	16 - Mar	02 - Oct
11 - Jan	10 - Feb	10 - Mar	17 - Mar	04 - Oct
12 - Jan	11 - Feb	11 - Mar	18 - Mar	06 - Oct
13 - Jan	12 - Feb	12 - Mar	19 - Mar	08 - Oct
14 - Jan	13 - Feb	13 - Mar	20 - Mar	10 - Oct
15 - Jan	14 - Feb	14 - Mar	21 - Mar	11 - Oct
16 - Jan	15 - Feb	15 - Mar	23 - Mar	11 - Oct
17 - Jan	16 - Feb	16 - Mar	25 - Mar	12 - Oct
18 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
19 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
20 - Jan	19 - Feb	19 - Mar	30 - Mar	18 - Oct
21 - Jan	20 - Feb	20 - Mar	02 - Apr	23 - Oct
22 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
23 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
24 - Jan	23 - Feb	23 - Mar	04 - Apr	25 - Oct
25 - Jan	24 - Feb	24 - Mar	07 - Apr	28 - Oct
26 - Jan	25 - Feb	25 - Mar	09 - Apr	29 - Oct
27 - Jan	26 - Feb	26 - Mar	11 - Apr	31 - Oct
28 - Jan	27 - Feb	27 - Mar	12 - Apr	01 - Nov
29 - Jan	28 - Feb	28 - Mar	14 - Apr	02 - Nov
30 - Jan	02 - Mar	30 - Mar	17 - Apr	04 - Nov
31 - Jan	03 - Mar	31 - Mar	21 - Apr	07 - Nov
01 - Feb	04 - Mar	01 - Apr	23 - Apr	08 - Nov
02 - Feb	05 - Mar	02 - Apr	27 - Apr	10 - Nov
03 - Feb	06 - Mar	03 - Apr	03 - May	13 - Nov
04 - Feb	07 - Mar	04 - Apr	05 - May	13 - Nov
05 - Feb	08 - Mar	05 - Apr	14 - May	15 - Nov
06 - Feb	09 - Mar	06 - Apr	16 - May	16 - Nov
07 - Feb	11 - Mar	08 - Apr	19 - Sep	23 - Nov
08 - Feb	13 - Mar	10 - Apr	25 - Sep	25 - Nov
09 - Feb	14 - Mar	11 - Apr	30 - Sep	27 - Nov

2.1 Sunraysia district

10 - Feb	16 - Mar	13 - Apr	02 - Oct	28 - Nov
11 - Feb	17 - Mar	14 - Apr	04 - Oct	29 - Nov
12 - Feb	18 - Mar	15 - Apr	06 - Oct	29 - Nov
13 - Feb	19 - Mar	16 - Apr	08 - Oct	30 - Nov
14 - Feb	20 - Mar	17 - Apr	10 - Oct	01 - Dec
15 - Feb	21 - Mar	18 - Apr	11 - Oct	02 - Dec
16 - Feb	23 - Mar	20 - Apr	11 - Oct	02 - Dec
17 - Feb	25 - Mar	22 - Apr	12 - Oct	02 - Dec
18 - Feb	27 - Mar	24 - Apr	14 - Oct	03 - Dec
19 - Feb	28 - Mar	25 - Apr	14 - Oct	03 - Dec
20 - Feb	30 - Mar	27 - Apr	18 - Oct	05 - Dec
21 - Feb	02 - Apr	30 - Apr	23 - Oct	07 - Dec
22 - Feb	03 - Apr	01 - May	24 - Oct	09 - Dec
23 - Feb	04 - Apr	02 - May	25 - Oct	09 - Dec
24 - Feb	04 - Apr	02 - May	25 - Oct	09 - Dec
25 - Feb	07 - Apr	05 - May	28 - Oct	11 - Dec
26 - Feb	09 - Apr	07 - May	29 - Oct	11 - Dec
27 - Feb	11 - Apr	09 - May	31 - Oct	13 - Dec
28 - Feb	12 - Apr	10 - May	01 - Nov	14 - Dec
01 - Mar	14 - Apr	12 - May	02 - Nov	14 - Dec
02 - Mar	15 - Apr	13 - May	03 - Nov	14 - Dec
03 - Mar	17 - Apr	15 - May	04 - Nov	15 - Dec
04 - Mar	21 - Apr	19 - May	07 - Nov	17 - Dec
05 - Mar	23 - Apr	21 - May	08 - Nov	18 - Dec
06 - Mar	27 - Apr	25 - May	10 - Nov	19 - Dec
07 - Mar	03 - May	31 - May	13 - Nov	22 - Dec
08 - Mar	05 - May	02 - Jun	13 - Nov	22 - Dec
09 - Mar	14 - May	11 - Jun	15 - Nov	24 - Dec
10 - Mar	16 - May	13 - Jun	16 - Nov	25 - Dec
11 - Mar	09 - Sep	07 - Oct	21 - Nov	29 - Dec
12 - Mar	19 - Sep	17 - Oct	23 - Nov	29 - Dec
13 - Mar	24 - Sep	22 - Oct	25 - Nov	31 - Dec
14 - Mar	25 - Sep	23 - Oct	25 - Nov	31 - Dec
15 - Mar	30 - Sep	28 - Oct	27 - Nov	01 - Jan
16 - Mar	30 - Sep	28 - Oct	27 - Nov	01 - Jan
17 - Mar	02 - Oct	30 - Oct	28 - Nov	02 - Jan
18 - Mar	04 - Oct	01 - Nov	29 - Nov	03 - Jan
19 - Mar	06 - Oct	03 - Nov	29 - Nov	03 - Jan
20 - Mar	08 - Oct	05 - Nov	30 - Nov	05 - Jan
21 - Mar	10 - Oct	07 - Nov	01 - Dec	06 - Jan
22 - Mar	11 - Oct	08 - Nov	02 - Dec	06 - Jan
23 - Mar	11 - Oct	08 - Nov	02 - Dec	06 - Jan
24 - Mar	11 - Oct	08 - Nov	02 - Dec	06 - Jan
25 - Mar	11 - Oct	08 - Nov	02 - Dec	06 - Jan
26 - Mar	12 - Oct	09 - Nov	02 - Dec	06 - Jan
27 - Mar	13 - Oct	10 - Nov	03 - Dec	07 - Jan
28 - Mar	14 - Oct	11 - Nov	03 - Dec	07 - Jan
29 - Mar	14 - Oct	11 - Nov	03 - Dec	07 - Jan
30 - Mar	16 - Oct	13 - Nov	04 - Dec	08 - Jan
31 - Mar	18 - Oct	15 - Nov	05 - Dec	09 - Jan
01 - Apr	20 - Oct	17 - Nov	06 - Dec	10 - Jan
02 - Apr	21 - Oct	18 - Nov	06 - Dec	10 - Jan
03 - Apr	23 - Oct	20 - Nov	07 - Dec	10 - Jan
04 - Apr	24 - Oct	21 - Nov	09 - Dec	11 - Jan

2.1 Sunraysia district

05 - Apr	25 - Oct	22 - Nov	09 - Dec	11 - Jan
06 - Apr	26 - Oct	23 - Nov	09 - Dec	11 - Jan
07 - Apr	27 - Oct	24 - Nov	10 - Dec	12 - Jan
08 - Apr	28 - Oct	25 - Nov	11 - Dec	13 - Jan
09 - Apr	28 - Oct	25 - Nov	11 - Dec	13 - Jan
10 - Apr	29 - Oct	26 - Nov	11 - Dec	13 - Jan
11 - Apr	30 - Oct	27 - Nov	12 - Dec	14 - Jan
12 - Apr	31 - Oct	28 - Nov	13 - Dec	15 - Jan
13 - Apr	01 - Nov	29 - Nov	14 - Dec	16 - Jan
14 - Apr	02 - Nov	30 - Nov	14 - Dec	16 - Jan
15 - Apr	02 - Nov	30 - Nov	14 - Dec	16 - Jan
16 - Apr	03 - Nov	01 - Dec	14 - Dec	16 - Jan
17 - Apr	04 - Nov	02 - Dec	15 - Dec	17 - Jan
18 - Apr	04 - Nov	02 - Dec	15 - Dec	17 - Jan
19 - Apr	05 - Nov	03 - Dec	16 - Dec	17 - Jan
20 - Apr	05 - Nov	03 - Dec	16 - Dec	17 - Jan
21 - Apr	07 - Nov	05 - Dec	17 - Dec	18 - Jan
22 - Apr	07 - Nov	05 - Dec	17 - Dec	18 - Jan
23 - Apr	08 - Nov	06 - Dec	18 - Dec	19 - Jan
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13 - May	15 - Nov	13 - Dec	24 - Dec	25 - Jan

2.1 Sunraysia district

14 - May	15 - Nov	13 - Dec	24 - Dec	25 - Jan
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28 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan

2.1 Sunraysia district

29 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
30 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
31 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
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10 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
11 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
12 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
13 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
14 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
15 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
16 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
17 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
18 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
19 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
20 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
21 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
22 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
23 - Sep	24 - Nov	22 - Dec	30 - Dec	31 - Jan
24 - Sep	24 - Nov	22 - Dec	30 - Dec	31 - Jan
25 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
26 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
27 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
28 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
29 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
30 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
01 - Oct	27 - Nov	25 - Dec	01 - Jan	02 - Feb
02 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
03 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
04 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
05 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
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07 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
08 - Oct	30 - Nov	28 - Dec	05 - Jan	05 - Feb
09 - Oct	30 - Nov	28 - Dec	05 - Jan	05 - Feb
10 - Oct	01 - Dec	29 - Dec	06 - Jan	06 - Feb
11 - Oct	01 - Dec	29 - Dec	06 - Jan	06 - Feb
12 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb
13 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb
14 - Oct	03 - Dec	31 - Dec	07 - Jan	07 - Feb
15 - Oct	03 - Dec	31 - Dec	07 - Jan	07 - Feb
16 - Oct	04 - Dec	01 - Jan	08 - Jan	08 - Feb
17 - Oct	04 - Dec	01 - Jan	08 - Jan	08 - Feb
18 - Oct	05 - Dec	02 - Jan	09 - Jan	09 - Feb
19 - Oct	05 - Dec	02 - Jan	09 - Jan	09 - Feb
20 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb
21 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb

2.1 Sunraysia district

22 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb
23 - Oct	07 - Dec	04 - Jan	10 - Jan	10 - Feb
24 - Oct	07 - Dec	04 - Jan	10 - Jan	10 - Feb
25 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
26 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
27 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
28 - Oct	10 - Dec	07 - Jan	12 - Jan	12 - Feb
29 - Oct	11 - Dec	08 - Jan	13 - Jan	13 - Feb
30 - Oct	11 - Dec	08 - Jan	13 - Jan	13 - Feb
31 - Oct	12 - Dec	09 - Jan	14 - Jan	14 - Feb
01 - Nov	13 - Dec	10 - Jan	15 - Jan	15 - Feb
02 - Nov	14 - Dec	11 - Jan	16 - Jan	16 - Feb
03 - Nov	14 - Dec	11 - Jan	16 - Jan	16 - Feb
04 - Nov	14 - Dec	11 - Jan	16 - Jan	16 - Feb
05 - Nov	15 - Dec	12 - Jan	17 - Jan	17 - Feb
06 - Nov	16 - Dec	13 - Jan	17 - Jan	17 - Feb
07 - Nov	17 - Dec	14 - Jan	18 - Jan	17 - Feb
08 - Nov	17 - Dec	14 - Jan	18 - Jan	17 - Feb
09 - Nov	18 - Dec	15 - Jan	19 - Jan	19 - Feb
10 - Nov	19 - Dec	16 - Jan	21 - Jan	21 - Feb
11 - Nov	19 - Dec	16 - Jan	21 - Jan	21 - Feb
12 - Nov	20 - Dec	17 - Jan	22 - Jan	21 - Feb
13 - Nov	21 - Dec	18 - Jan	23 - Jan	23 - Feb
14 - Nov	22 - Dec	19 - Jan	23 - Jan	23 - Feb
15 - Nov	23 - Dec	20 - Jan	25 - Jan	25 - Feb
16 - Nov	24 - Dec	21 - Jan	25 - Jan	25 - Feb
17 - Nov	25 - Dec	22 - Jan	26 - Jan	26 - Feb
18 - Nov	26 - Dec	23 - Jan	28 - Jan	28 - Feb
19 - Nov	26 - Dec	23 - Jan	28 - Jan	28 - Feb
20 - Nov	27 - Dec	24 - Jan	29 - Jan	02 - Mar
21 - Nov	28 - Dec	25 - Jan	29 - Jan	02 - Mar
22 - Nov	29 - Dec	26 - Jan	30 - Jan	03 - Mar
23 - Nov	29 - Dec	26 - Jan	30 - Jan	03 - Mar
24 - Nov	29 - Dec	26 - Jan	30 - Jan	03 - Mar
25 - Nov	30 - Dec	27 - Jan	31 - Jan	04 - Mar
26 - Nov	31 - Dec	28 - Jan	01 - Feb	05 - Mar
27 - Nov	31 - Dec	28 - Jan	01 - Feb	05 - Mar
28 - Nov	01 - Jan	29 - Jan	02 - Feb	06 - Mar
29 - Nov	02 - Jan	30 - Jan	03 - Feb	07 - Mar
30 - Nov	03 - Jan	31 - Jan	04 - Feb	08 - Mar
01 - Dec	05 - Jan	02 - Feb	05 - Feb	09 - Mar
02 - Dec	06 - Jan	03 - Feb	06 - Feb	11 - Mar
03 - Dec	06 - Jan	03 - Feb	06 - Feb	11 - Mar
04 - Dec	07 - Jan	04 - Feb	07 - Feb	13 - Mar
05 - Dec	08 - Jan	05 - Feb	08 - Feb	14 - Mar
06 - Dec	09 - Jan	06 - Feb	09 - Feb	16 - Mar
07 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
08 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
09 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
10 - Dec	11 - Jan	08 - Feb	11 - Feb	18 - Mar
11 - Dec	12 - Jan	09 - Feb	12 - Feb	19 - Mar
12 - Dec	13 - Jan	10 - Feb	13 - Feb	20 - Mar
13 - Dec	14 - Jan	11 - Feb	14 - Feb	21 - Mar
14 - Dec	15 - Jan	12 - Feb	15 - Feb	23 - Mar

2.1 Sunraysia district

15 - Dec	16 - Jan	13 - Feb	16 - Feb	25 - Mar
16 - Dec	17 - Jan	14 - Feb	17 - Feb	27 - Mar
17 - Dec	17 - Jan	14 - Feb	17 - Feb	27 - Mar
18 - Dec	18 - Jan	15 - Feb	17 - Feb	27 - Mar
19 - Dec	19 - Jan	16 - Feb	19 - Feb	30 - Mar
20 - Dec	21 - Jan	18 - Feb	21 - Feb	03 - Apr
21 - Dec	22 - Jan	19 - Feb	21 - Feb	03 - Apr
22 - Dec	23 - Jan	20 - Feb	23 - Feb	04 - Apr
23 - Dec	23 - Jan	20 - Feb	23 - Feb	04 - Apr
24 - Dec	25 - Jan	22 - Feb	25 - Feb	09 - Apr
25 - Dec	25 - Jan	22 - Feb	25 - Feb	09 - Apr
26 - Dec	26 - Jan	23 - Feb	26 - Feb	11 - Apr
27 - Dec	28 - Jan	25 - Feb	28 - Feb	14 - Apr
28 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
29 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
30 - Dec	30 - Jan	27 - Feb	03 - Mar	21 - Apr
31 - Dec	31 - Dec	28 - Feb	04 - Mar	23 - Apr

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	03 - Feb	03 - Mar	11 - Mar	19 - Oct
02 - Jan	04 - Feb	04 - Mar	12 - Mar	19 - Oct
03 - Jan	05 - Feb	05 - Mar	13 - Mar	19 - Oct
04 - Jan	06 - Feb	06 - Mar	15 - Mar	20 - Oct
05 - Jan	07 - Feb	07 - Mar	16 - Mar	21 - Oct
06 - Jan	08 - Feb	08 - Mar	18 - Mar	24 - Oct
07 - Jan	09 - Feb	09 - Mar	19 - Mar	24 - Oct
08 - Jan	11 - Feb	11 - Mar	22 - Mar	27 - Oct
09 - Jan	12 - Feb	12 - Mar	25 - Mar	29 - Oct
10 - Jan	13 - Feb	13 - Mar	27 - Mar	31 - Oct
11 - Jan	14 - Feb	14 - Mar	30 - Mar	03 - Nov
12 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
13 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
14 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
15 - Jan	16 - Feb	16 - Mar	04 - Apr	06 - Nov
16 - Jan	17 - Feb	17 - Mar	07 - Apr	09 - Nov
17 - Jan	18 - Feb	18 - Mar	09 - Apr	10 - Nov
18 - Jan	19 - Feb	19 - Mar	11 - Apr	11 - Nov
19 - Jan	20 - Feb	20 - Mar	14 - Apr	13 - Nov
20 - Jan	22 - Feb	22 - Mar	18 - Apr	16 - Nov
21 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
22 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
23 - Jan	24 - Feb	24 - Mar	23 - Apr	18 - Nov
24 - Jan	25 - Feb	25 - Mar	02 - May	21 - Nov
25 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
26 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
27 - Jan	01 - Mar	29 - Mar	27 - Sep	01 - Dec
28 - Jan	02 - Mar	30 - Mar	30 - Sep	02 - Dec
29 - Jan	03 - Mar	31 - Mar	02 - Oct	03 - Dec
30 - Jan	04 - Mar	01 - Apr	05 - Oct	05 - Dec
31 - Jan	05 - Mar	02 - Apr	09 - Oct	07 - Dec
01 - Feb	06 - Mar	03 - Apr	10 - Oct	07 - Dec
02 - Feb	08 - Mar	05 - Apr	13 - Oct	09 - Dec
03 - Feb	10 - Mar	07 - Apr	19 - Oct	10 - Dec
04 - Feb	11 - Mar	08 - Apr	19 - Oct	10 - Dec
05 - Feb	12 - Mar	09 - Apr	19 - Oct	10 - Dec
06 - Feb	13 - Mar	10 - Apr	19 - Oct	10 - Dec
07 - Feb	15 - Mar	12 - Apr	20 - Oct	11 - Dec
08 - Feb	16 - Mar	13 - Apr	21 - Oct	11 - Dec
09 - Feb	18 - Mar	15 - Apr	24 - Oct	12 - Dec
10 - Feb	19 - Mar	16 - Apr	24 - Oct	12 - Dec
11 - Feb	20 - Mar	17 - Apr	25 - Oct	13 - Dec
12 - Feb	22 - Mar	19 - Apr	27 - Oct	15 - Dec
13 - Feb	25 - Mar	22 - Apr	29 - Oct	16 - Dec
14 - Feb	27 - Mar	24 - Apr	31 - Oct	17 - Dec
15 - Feb	30 - Mar	27 - Apr	03 - Nov	19 - Dec
16 - Feb	31 - Mar	28 - Apr	04 - Nov	20 - Dec

2.2 Riverland district

17 - Feb	04 - Apr	02 - May	06 - Nov	21 - Dec
18 - Feb	07 - Apr	05 - May	09 - Nov	23 - Dec
19 - Feb	09 - Apr	07 - May	10 - Nov	24 - Dec
20 - Feb	11 - Apr	09 - May	11 - Nov	24 - Dec
21 - Feb	14 - Apr	12 - May	13 - Nov	25 - Dec
22 - Feb	15 - Apr	13 - May	14 - Nov	26 - Dec
23 - Feb	18 - Apr	16 - May	16 - Nov	28 - Dec
24 - Feb	21 - Apr	19 - May	17 - Nov	28 - Dec
25 - Feb	23 - Apr	21 - May	18 - Nov	29 - Dec
26 - Feb	02 - May	30 - May	21 - Nov	31 - Dec
27 - Feb	05 - May	02 - Jun	22 - Nov	31 - Dec
28 - Feb	08 - Sep	06 - Oct	27 - Nov	05 - Jan
01 - Mar	21 - Sep	19 - Oct	29 - Nov	07 - Jan
02 - Mar	27 - Sep	25 - Oct	01 - Dec	08 - Jan
03 - Mar	30 - Sep	28 - Oct	02 - Dec	09 - Jan
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20 - Mar	24 - Oct	21 - Nov	12 - Dec	18 - Jan
21 - Mar	25 - Oct	22 - Nov	13 - Dec	18 - Jan
22 - Mar	26 - Oct	23 - Nov	14 - Dec	19 - Jan
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26 - Mar	29 - Oct	26 - Nov	16 - Dec	20 - Jan
27 - Mar	30 - Oct	27 - Nov	16 - Dec	20 - Jan
28 - Mar	31 - Oct	28 - Nov	17 - Dec	21 - Jan
29 - Mar	01 - Nov	29 - Nov	17 - Dec	21 - Jan
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31 - Mar	03 - Nov	01 - Dec	19 - Dec	22 - Jan
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07 - Apr	08 - Nov	06 - Dec	22 - Dec	25 - Jan
08 - Apr	09 - Nov	07 - Dec	23 - Dec	26 - Jan
09 - Apr	09 - Nov	07 - Dec	23 - Dec	26 - Jan
10 - Apr	10 - Nov	08 - Dec	24 - Dec	27 - Jan
11 - Apr	11 - Nov	09 - Dec	24 - Dec	27 - Jan

2.2 Riverland district

12 - Apr	11 - Nov	09 - Dec	24 - Dec	27 - Jan
13 - Apr	11 - Nov	09 - Dec	24 - Dec	27 - Jan
14 - Apr	13 - Nov	11 - Dec	25 - Dec	29 - Jan
15 - Apr	13 - Nov	11 - Dec	25 - Dec	29 - Jan
16 - Apr	14 - Nov	12 - Dec	26 - Dec	30 - Jan
17 - Apr	14 - Nov	12 - Dec	26 - Dec	30 - Jan
18 - Apr	15 - Nov	13 - Dec	27 - Dec	31 - Jan
19 - Apr	16 - Nov	14 - Dec	28 - Dec	01 - Feb
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2.2 Riverland district

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2.2 Riverland district

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2.2 Riverland district

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10 - Nov	23 - Dec	20 - Jan	26 - Jan	01 - Mar
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12 - Nov	24 - Dec	21 - Jan	27 - Jan	02 - Mar
13 - Nov	25 - Dec	22 - Jan	29 - Jan	04 - Mar

2.2 Riverland district

14 - Nov	25 - Dec	22 - Jan	29 - Jan	04 - Mar
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17 - Dec	20 - Jan	17 - Feb	23 - Feb	21 - Apr
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20 - Dec	22 - Jan	19 - Feb	24 - Feb	23 - Apr
21 - Dec	23 - Jan	20 - Feb	25 - Feb	02 - May
22 - Dec	24 - Jan	21 - Feb	28 - Feb	21 - Sep
23 - Dec	25 - Jan	22 - Feb	28 - Feb	21 - Sep
24 - Dec	26 - Jan	23 - Feb	01 - Mar	27 - Sep
25 - Dec	27 - Jan	24 - Feb	02 - Mar	30 - Sep
26 - Dec	29 - Jan	26 - Feb	04 - Mar	05 - Oct
27 - Dec	30 - Jan	27 - Feb	05 - Mar	09 - Oct
28 - Dec	31 - Jan	28 - Feb	06 - Mar	10 - Oct
29 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
30 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
31 - Dec	03 - Feb	03 - Mar	11 - Mar	19 - Oct

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	31 - Jan	28 - Feb	10 - Mar	16 - Oct
02 - Jan	02 - Feb	02 - Mar	12 - Mar	18 - Oct
03 - Jan	03 - Feb	03 - Mar	15 - Mar	20 - Oct
04 - Jan	04 - Feb	04 - Mar	16 - Mar	22 - Oct
05 - Jan	05 - Feb	05 - Mar	17 - Mar	22 - Oct
06 - Jan	06 - Feb	06 - Mar	19 - Mar	24 - Oct
07 - Jan	07 - Feb	07 - Mar	22 - Mar	25 - Oct
08 - Jan	08 - Feb	08 - Mar	24 - Mar	27 - Oct
09 - Jan	09 - Feb	09 - Mar	27 - Mar	28 - Oct
10 - Jan	10 - Feb	10 - Mar	28 - Mar	29 - Oct
11 - Jan	11 - Feb	11 - Mar	02 - Apr	31 - Oct
12 - Jan	12 - Feb	12 - Mar	04 - Apr	01 - Nov
13 - Jan	14 - Feb	14 - Mar	10 - Apr	05 - Nov
14 - Jan	15 - Feb	15 -Mar	16 - Apr	08 - Nov
15 - Jan	16 - Feb	16 - Mar	30 - Aug	13 - Nov
16 - Jan	17 - Feb	17 - Mar	11 - Sep	15 - Nov
17 - Jan	18 - Feb	18 - Mar	15 - Sep	16 - Nov
18 - Jan	19 - Feb	19 - Mar	17 - Sep	17 - Nov
19 - Jan	20 - Feb	20 - Mar	22 - Sep	18 - Nov
20 - Jan	21 - Feb	21 - Mar	25 - Sep	20 - Nov
21 - Jan	23 - Feb	23 - Mar	30 - Sep	22 - Nov
22 - Jan	24 - Feb	24 - Mar	02 - Oct	23 - Nov
23 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
24 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
25 - Jan	28 - Feb	28 - Mar	07 - Oct	25 - Nov
26 - Jan	01 - Mar	29 - Mar	07 - Oct	25 - Nov
27 - Jan	03 - Mar	31 - Mar	09 - Oct	25 - Nov
28 - Jan	04 - Mar	01 – Apr	09 – Oct	25 - Nov
29 - Jan	06 - Mar	03 - Apr	12 - Oct	27 - Nov
30 - Jan	07 - Mar	04 - Apr	13 - Oct	28 - Nov
31 - Jan	09 - Mar	06 - Apr	15 - Oct	28 - Nov
01 - Feb	10 - Mar	07 - Apr	16 - Oct	30 - Nov
02 - Feb	11 - Mar	08 - Apr	16 - Oct	30 - Nov
03 - Feb	12 - Mar	09 - Apr	18 - Oct	02 - Dec
04 - Feb	15 - Mar	12 - Apr	20 - Oct	03 - Dec
05 - Feb	16 - Mar	13 - Apr	22 - Oct	04 - Dec
06 - Feb	17 - Mar	14 - Apr	22 - Oct	04 - Dec
07 - Feb	19 - Mar	16 - Apr	24 - Oct	06 - Dec

2.3 MIA-Riverina

08 - Feb	22 - Mar	19 - Apr	25 - Oct	07 - Dec
09 - Feb	24 - Mar	21 - Apr	27 - Oct	08 - Dec
10 - Feb	27 - Mar	24 - Apr	28 - Oct	09 - Dec
11 - Feb	28 - Mar	25 - Apr	29 - Oct	10 - Dec
12 - Feb	02 - Apr	30 - Apr	31 - Oct	11 - Dec
13 - Feb	04 - Apr	02 - May	01 - Nov	12 - Dec
14 - Feb	08 - Apr	06 - May	03 - Nov	13 - Dec
15 - Feb	10 - Apr	08 - May	05 - Nov	14 - Dec
16 - Feb	16 - Apr	14 - May	08 - Nov	16 - Dec
17 - Feb	30 - Aug	27 - Sep	13 - Nov	21 - Dec
18 - Feb	11 - Sep	09 -Oct	15 - Nov	23 - Dec
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20 - Feb	17 - Sep	15 - Oct	17 - Nov	24 - Dec
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22 - Feb	25 - Sep	23 - Oct	20 - Nov	26 - Dec
23 - Feb	26 - Sep	24 - Oct	21 - Nov	27 - Dec
24 - Feb	30 - Sep	28 - Oct	22 - Nov	28 - Dec
25 - Feb	02 - Oct	30 - Oct	23 - Nov	28 - Dec
26 - Feb	04 - Oct	01 - Nov	24 - Nov	29 - Dec
27 - Feb	05 - Oct	02 - Nov	24 - Nov	29 - Dec
28 - Feb	06 - Oct	03 - Nov	25 - Nov	31 - Dec
01 - Mar	07 - Oct	04 - Nov	25 - Nov	31 - Dec
02 - Mar	07 - Oct	04 - Nov	25 - Nov	31 - Dec
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07 - Mar	12 - Oct	09 - Nov	27 - Nov	01 - Jan
08 - Mar	13 - Oct	10 - Nov	28 - Nov	02 - Jan
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2.3 MIA-Riverina

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2.3 MIA-Riverina

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2.3 MIA-Riverina

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2.3 MIA-Riverina

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2.3 MIA-Riverina

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APPENDIX 3 FORMS

3.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
POSTAL OR BUSINESS ADDRESS			
	POST CODE		
PROPERTY ADDRESS			
	POST CODE		
REAL PROPERTY DESCRIPTION (of area under planting)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operational Manual - Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Cucurbits (type)
Citrus	Tomato

3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION

APPLICATION FOR PACKER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS		
NAME OF PACKER		
AQIS REE NUMBER (if applicable)		
POSTAL ADDRESS		
	POST CODE	
PREMISES ADDRESS		
	POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a packer of .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operational Manual - Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to packers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Cucurbits (type)
Citrus	Tomato

3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT EXPORTER REGISTRATION AND INSPECTION APPLICATION

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Version 3 of the Australian - New Zealand Bilateral Quarantine Arrangement and the BQA Systems Operational Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the BQA and the Systems Operational Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for BQA commodities will provide properly identified Inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection
The following persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Appendix 3.3

Treatment Loading Supervision Authority

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the BQA for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of BQA commodities as is required by the BQA and the contents of this Manual.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the BQA and the Systems Operation Manual Version 3 of May 1999 required for inspection purposes

Name of Applicant .....

Signature .....

Date .....

3.4 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Date	Trade Description	Tick
Commodity	Commodity	
No of Cartons	Registered Grower No.	
Registered Grower No.	Registered Packing Establishment	
	.....	
Ex 28 Number/s:	Australian Origin	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250	
Exporter/s	(Tick one)	
	Exporter Inspection completed by:.....	
	(a) Exporter	
Inspector Name	(b) Exporter delegate (name)	
(Block Letters)	**Inspected by**:	
.....	Grower Line	
Inspector's Signature	Consignment Line	

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NQ**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed **Failed** **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Quarantine Pes

3.5 FUMIGATION RECORD

Page 1 of 2

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	Number of Cartons/Commodity	Temperatures Taken *

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

3.6 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKING HOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 .6^0C.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS						INITIALS				
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor					

3.7 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand that should I/we wish to re-enter the Arrangement protocol at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in block letters Signature Date

....

Voluntary Withdrawal

I/we agree that my/our property is no longer required to be registered under the terms and conditions that are required for the New Zealand export trade for BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand that should I/we wish to re-enter the Arrangement at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in Block letters Signature Date

....

AQIS OFFICE DOCUMENTATION
Fax to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or
Inspector's Signature

.....

3.8 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection of the following property/premises:- (Grower - Packer) (delete one)

Name .....
Address .....
.....
.....
Reg No .....

I believe that for the following reasons that the above Grower/Company no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) that they have no intention to correct the above mentioned deficiency in the immediate future.

I hereby declare that the above mentioned grower/packer is suspended from the Australia - New Zealand BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Grower Name	Grower's Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

3.9 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY ALL TOMATO CONSIGNMENTS TO BRISBANE, FROM TOWNSVILLE, BUNDABERG OR CAIRNS

DECLARATION OF TREATMENT

I, ... of .....

.....

hereby declare that the ..... number of tomatoes consigned

to .....on .....(date)

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute.

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

2. nominate a sample size of 600/950/1250* fruits to be inspected from each lot.
   (*Delete as applicable)

   AND

3. further declare that .....(insert name of supervisor) a designated person nominated by .....(insert name of exporter) has supervised the loading of this consignment for transport to .....
   .....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....19.....

Signature ..... Witness .....

3.10 TOMATO VARIETY DECLARATION

TOMATO VARIETY DECLARATION

PRODUCTION OF TOMATOES FOR EXPORT TO NEW ZEALAND

I, ... registered

New Zealand Grower No.....declare the tomatoes supplied

by me on the ..... to .....…

are of the variety ....., and these tomatoes were

harvested from the following registered block/s……

……

Signed ..... Dated .....……

Appendix 3.11

3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the BQA Systems Operational Manual Version 3 of May 1999 and have the ability to recognise and identify the pests and weed seeds that are contained in the MPL's for quarantine pests.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the BQA and the Instructions contained in the Operations Manual for Australian New Zealand BQA.

Appendix 3.11

Signature .....
Printed Name ..... Date .....

Approved ..... Senior Inspector/Superving Inspector
Date ..... Seal/Stamp .....

3.12 CONTAINER HYGIENE REPORT

CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF CONTAINERS

Date.....

Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28 Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

3.13 STATUTORY DECLARATION

THE OATHS ACTS - 1867-1960

STATUTORY DECLARATION

State to wit .....

I (Name)..... of address.....
in the State of..... do solemnly and sincerely declare that:

Product (name)..... supplied to (exporter/packinghouse, name and address .....
.....have been grown under the AQIS/MAF protocol procedures for export of such produce to New Zealand.

My registered grower number is ..... and is current and the conditions as required by the BQA for growers have been complied with.

The produce aforementioned was loaded under my supervision on the (date).....
and comprised ..... Bins or ..... Tonnes Bulk and was loaded onto registered truck no. ..... and trailer no.....

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of "The Oaths Acts 1867-1960"

.....Signature .....

A Justice of Peace

3.14 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare that the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

3.15 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

<table>
<tr><td rowspan="3">Grower name and address:</td><td>Cucurbit type (please tick ✓)</td><td>Treatment (please tick ✓)</td></tr>
<tr><td>Cucumber ☐
Honeydew melon ☐
Rockmelon ☐
Scallopini ☐
Watermelon ☐
Zucchini ☐</td><td>Appendix 8 ☐
(Dimethoate dip)
Appendix 9 ☐
(methyl bromide)
Appendix 10 ☐
(winter window)</td></tr>
<tr><td colspan="2">Declaration

I,……hereby declare that the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.

…… ……/……/……
Signature Date</td></tr>
<tr><td>Grower number:</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>Consignee name and address:</td></tr>
</table>

Production block number	Package type (carton, bin etc)	Number of packages	Total mass

australia - new zealand bilateral quarantine arrangement

systems operation manual - amendment 4

Department of AGRICULTURE FISHERIES & FORESTRY - AUSTRALIA

AUSTRALIAN QUARANTINE AND INSPECTION SERVICE

AGRICULTURE, FISHERIES AND FORESTRY - AUSTRALIA

This systems operation manual incorporates the New Zealand import health standards for Australian fruit fly host material and the Australian Quarantine and Inspection service's operational requirements.

This manual is maintained and controlled by the AQIS Plant Programs Section in Canberra.

The Australian Quarantine and Inspection Service (AQIS) is an agency within the Commonwealth Department of Agriculture, Fisheries and Forestry - Australia.

New Zealand\Bqasom\NZSOM-amendment4.doc

March 2001

SYSTEMS OPERATIONS MANUAL

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT INCORPORATING THE NEW ZEALAND IMPORT HEALTH STANDARDS AND AQIS OPERATIONS REQUIREMENTS

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES ..... **VI**

AMENDMENT RECORD ..... **VIII**

GLOSSARY OF TERMS ..... **X**

DEFINITIONS ..... **XI**

INTRODUCTION **1**

SECTION 1. BACKGROUND **1**

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements ***1***

1.2 Scope of the Manual ***2***

SECTION 2. PEST CATEGORIES **1**

2.1 Pest Category Classifications ***1***

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS 1

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS 1

2.1.3 International Phytosanitary Certificate (IPC) Pests - Risk Group 1 - PESTS 2

2.2 Maximum Pest Levels ***2***

2.3 Contaminants ***1***

SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS **1**

3.1 Country freedom from fruit flies (based on NASS Standard 158.03.07) ***1***

3.2 Area freedom districts within Australia (based on NASS standard 158.03.06) ***1***

3.2.1 Approved area freedom districts 3

3.2.1.1 Riverina - MIA 3

3.2.1.2 Sunraysia - Victoria and New South Wales 3

3.2.1.3 Riverland - South Australia 3

3.2.1.4 Tasmania 3

3.2.2 Registration requirements 4

3.2.3 Post treatment security - area freedom 5

3.2.4 Post treatment transportation of product to export loading points 5

3.2.5 Phytosanitary certification endorsements 6

3.3 Methyl bromide fumigation ***7***

3.3.1 Registration requirements 7

3.3.2 Treatment details and fumigator responsibilities 8

3.3.3 Post treatment security - methyl bromide fumigation 10

3.3.4 Post treatment transportation of product to export loading point 10

3.3.5 Phytosanitary certificate endorsements 10

3.4. Dimethoate dip/spray ***12***

3.4.1 Registration requirements 12

3.4.2 Treatment details and treatment centre responsibilities 14

3.4.3 Post treatment security - chemical dipping/spraying 15

3.4.4 Post treatment transportation of product to export loading point 15

3.4.5 Phytosanitary certificate endorsements 16

3.5 Cold Storage ***18***

3.5.1 Registration requirements 18

3.5.2 Treatment details and treatment centre responsibilities 19

3.5.2.1 Cold disinfestation procedures 19

3.5.2.2 Temperature recording 19

3.5.2.3 Record requirements 20

3.5.2.4 Auditing requirements – cold storage disinfestation centres 21

3.5.3 Post treatment security - cold storage disinfestation 21
3.5.4 Post treatment transportation of product to export loading point 21
3.5.5 Phytosanitary certificate endorsements 21
3.6 Non host status ***23***
3.6.1 Registration requirements 23
3.6.2 Treatment details and treatment centre responsibilities 23
3.6.3 Post treatment security - non-host status commodities 23
3.6.4 Post treatment transportation of product to export loading point 23
3.6.5 Phytosanitary certificate endorsement 24
3.7 Heat Treatments ***25***
3.8 Nil ***25***
3.9 Nil ***27***
3.10 Field control programmes ***28***
3.10.1 Grower responsibilities 28
3.10.2 Packinghouse responsibilities 29
3.10.3 Treatment centre responsibilities 29
3.10.4 Exporter responsibilities 29
3.10.5 Phytosanitary certificate endorsements 30
3.11 Winter Window – Field control systems Approach ***31***
3.11.1 Registration requirements 31
3.11.2 Treatment details and treatment centre responsibilities 32
3.11.3 Product security 32
3.11.4 Transporting and loading into export containers 32
3.11.5 Phytosanitary Certification 32
Attachment 1 to Section 3 – Summary of requirements for access of fruit fly host commodities into New Zealand from Australia ***35***
SECTION 4. MANAGEMENT RESPONSIBILITIES **1**
4.1 AQIS Canberra Office ***1***
4.2 State Departments of Agriculture (or equivalents) ***1***
4.3 AQIS State Offices ***2***
4.3.1 Registration Requirements 2
4.3.2. Sampling Requirements 3
4.3.2.1 Consignment Line Samples 4
4.3.2.2 Grower Line Samples 4
4.3.3 AQIS Inspection Procedures 4
4.3.4 Rejection Procedures 5
4.3.5 Split Consignment Inspections 6
4.4 Untreated Produce Being Forwarded from Country Areas ***6***
4.5 AQIS Auditing Requirements ***7***
4.5.1 AQIS BQA/IHS Audit Requirements 7
4.5.1.1 Grower/Audit Frequency: 7
4.5.1.2 Grower Audits - Certification Assurance Systems 8
4.5.1.3 Audit Requirements/Growers - Suspension Criteria 8
4.5.1.4 Grower Audits - Non Compliance 8
4.6 Audit Requirements/Crop Monitors ***9***
4.6.1 Crop Monitor Audits/Non Compliance 10
4.7 Audit Requirements/Packinghouses ***10***
4.7.1 Packinghouse Audits/Non Compliance 10
4.8 Audit Requirements - Treatment Centres ***11***
4.8.1 Treatment Centre Audits/Non Compliance 12
4.9 Audit Requirements - Exporters ***12***
4.9.1 Exporter Delegate Audits 12
4.9.2 Exporter/Exporter Delegate - Non Compliance 12
4.9.3 Audits after Product Rejections by AQIS 13
Attachment 1 to Section 4 – AQIS Plant Contact List ***14***

SECTION 5. GROWER RESPONSIBILITIES **1**
5.1 Registration ***1***
5.2 Responsibilities ***1***
5.3 Grower Audits ***2***
5.3.1 Grower Suspensions 2
5.3.2 Grower Audits - Non Compliance 3
5.3.3 Audit Requirements/Crop Monitors 4
5.3.4 Crop Monitor Audits/Non Compliance 4
SECTION 6. PACKINGHOUSE RESPONSIBILITIES **1**
6.1 Grower Registration - Commodity Specific ***1***
6.2 Packinghouse Responsibilities - Commodity Specific ***2***
6.3 Inspection Requirements ***3***
6.3.1 Documentation 3

6.4 Security and Supervision Responsibilities *3*
6.5 Packinghouse Audits *3*
6.5.1 Application for Registration 4
6.5.2 Continued Registration 4
6.6 Suspension of Packinghouse Registration *4*
SECTION 7. CERTIFICATION ASSURANCE ARRANGEMENTS - PACKINGHOUSE RESPONSIBILITIES **1**
7.1 General Requirements *1*
7.1.1 Auditing for New Zealand Requirements 1
7.1.2 CA - New Zealand Inspection Requirements 2
7.2 Documentation *3*
7.3 Post treatment Security *3*
SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES 1
8.1 Registration *1*
8.2 Process Controls *1*
8.3 BQA Treatments - AQIS Supervision *1*
8.3.1 Fumigation Centres 1
8.3.2 Cold Storage Centres 2
8.3.3 Dimethoate Treatments 2
8.3.3.1 Waxed produce 2
8.3.3.2 AQIS requirements 2
8.4 AQIS Audits of Treatment Centres *3*
SECTION 9. EXPORTER RESPONSIBILITIES **1**
9.1 Registration Requirements *1*
9.2 Exporter Responsibilities *1*
9.3 Exporter Inspection *1*
9.4 Split Consignment Inspections *2*
9.5 Untreated Produce being forwarded from Country Areas *3*
9.6 Delegation of Inspection *3*
9.7 Documentation *3*
9.8 Procedures for Exporter Rejected Produce *4*
9.9 Post treatment Security *4*
9.10 Security of Produce - Exporter/Freight Forwarder Premises *5*
9.11 Audits - Exporters *5*
9.12 Audits -Exporter's Delegate *5*
9.13 Exporter/Exporter Delegate - Non Compliance *6*
SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES **1**
10.1 Fruit Fly Area Freedom - Management Requirements *1*
10.1.1 Area Freedom - Fruit Flies 1
10.1.2 Validation of Area Freedom 1
10.1.3 Outbreak 1
10.2 Trapping *2*

SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS **1**
11.1 Redback Spiders - Lactrodectus hasselti *1*
11.2 Treatment details *1*
11.3 Traceability *1*
11.4 Additional precautionary measures *1*

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES **1**

AVOCADO **1**
BANANA **7**
CAPSICUM **11**
CITRUS **20**
CUCUMBER **27**
GRAPE **36**
MANGO **45**
MELON **48**
PAPAYA **57**
PINEAPPLE **60**
POMEGRANATE **65**
STRAWBERRY **68**
TOMATO **72**
WATERMELON **79**
ZUCCHINI & SCALLOPINI **87**

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY **1**

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT **1**
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT **9**
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA **16**

APPENDIX 3 FORMS **1**

3.1 APPLICATION FOR GROWER REGISTRATION **1**
3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION **2**
3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION **3**
3.4 INSPECTION RECORD **5**
3.5 FUMIGATION RECORD **6**
3.6 COLD DISINFESTATION RECORD **8**
3.7 WITHDRAWAL NOTICE **9**
3.8 SUSPENSION NOTICE **10**
3.9 DECLARATION OF DIMETHOATE TREATMENT **11**
3.10 TOMATO VARIETY DECLARATION **12**
3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES **13**
3.12 CONTAINER HYGIENE REPORT **15**
3.13 STATUTORY DECLARATION **16**
3.14 AVOCADO GROWER DECLARATION **17**
3.15 CUCURBIT GROWER DECLARATION **18**

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New Zealand Contact Officer Plant Programs Section Animal and Plant Programs Section Attn [redacted]	Canberra Office	3
AQIS Brisbane Office Senior Inspector Exports Attn [redacted]	Locked Mail Bag 1700 Spring Hill Queensland 4004	4
AQIS Brisbane Office State Contact Officer (C/A) Attn [redacted]	Locked Mail Bag 1700 Spring Hill Queensland 4004	5
AQIS Sydney Office Senior Export Inspector Attn [redacted]	Export/Import Branch PO Box 657 Mascot 2020	6
AQIS Sydney Office State Contact Officer (C/A) Attn [redacted]	Export/Import Branch PO Box 657 Mascot 2020 NSW	7
AQIS Melbourne Office Senior Export Inspector Attn [redacted]	PO Box 60 World Trade Centre Melbourne 3005	8
AQIS Melbourne Office State Contact Officer (C/A) Attn [redacted]	PO Box 60 World Trade Centre Melbourne 3005	9
AQIS Adelaide Office Senior Export Inspector Attn [redacted]	PO Box 63 Port Adelaide 5015	10

AQIS Adelaide Office State Contact Officer (C/A) Attn [redacted]	PO Box 63 Port Adelaide 5015	11
Dept of Agriculture W. Aust Senior Export Officer Attn [redacted]	PO Box 1410 Canning Vale 6155	12
Dept of Agriculture W.Aust State Contact Officer Attn [redacted]	PO Box 1410 Canning Vale 6155	13
Dept of Agriculture N.T. Attn [redacted]	PO Box 2268 Darwin 0801	14
Dept of Agriculture Tasmania Attn [redacted]	Macquarie Wharf No 1 Hobart 7000	15
Dept of Agriculture Tasmania State Contact Officer Attn [redacted]	Macquarie wharf No. 1 Hobart 7000	16
Ministry of Agriculture and Forestry Import Compliance Officer Attn [redacted]	PO Box 2526 Wellington New Zealand	17
[redacted] Plants Biosecurity Australia	AQIS Canberra Office	18
AQIS Mildura Office Attn [redacted]	PO Box 2756 Mildura 3500 Vic	19
AQIS Griffith Office Attn [redacted]	104 - 110 Banna Avenue Griffith NSW 2680	20
AQIS Bundaberg Office Attn [redacted]	PO Box 815 Bundaberg 4670	21
AQIS Nth Queensland Office Attn [redacted]	PO Box 96 Cairns 4870	22
AQIS Townsville Office Attn [redacted]	PO Box 1085 Townsville 4810	23
AQIS Riverland Office Attn [redacted]	PO Box 411 Loxton SA 5333	24
Victorian Department of Agriculture Attn [redacted]	Private Mail Bag 15 South Eastern Mail Centre 3176	25

New South Wales Agriculture Attn [redacted]	Locked Bag 21 Orange NSW	26
Primary Industries South Australia Attn [redacted]	GPO Box 1671 Adelaide	27
Queensland Department of Primary Industries Attn [redacted]	GPO Box 46 Brisbane QLD 4001	28
AQIS Mackay Office Attention [redacted]	PO Box 1517 Mackay QLD 4740	29
AQIS Townsville Office Attention [redacted]	PO Box 1085 Townsville 4810	30
AQIS Shepparton Office Attention [redacted]	PO Box 6251 Shepparton 3630	31

AQIS State Offices and State Departments of Agriculture will make up additional 'Official Distribution Lists' for their own requirements which may include industry bodies, exporters and packinghouse/growers. AQIS Offices and State Departments of Agriculture must implement procedures to record distribution lists and for the issue of controlled copies of this Manual and for amendments to this manual to those nominated on distribution lists.

AMENDMENT RECORD

Amendments to this Manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	[redacted]	18 June 1999
2		14 July 1999
3		27 April 2000
4		March 2001
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GLOSSARY OF TERMS

AFFA	Agriculture, Fisheries and Forests of Australia
ANVAS	Avocado Nursery Voluntary Accreditation Scheme
APPB	Animal and Plant Programs Branch (AQIS Canberra)
AQIS	Australian Quarantine and Inspection Service
BQA	Bilateral Quarantine Arrangement
CA	Certification Assurance
EC (FF+V) O's	Export Control (Fresh Fruit and Vegetable) Orders
EDB	Ethylene Dibromide
IHS	Import Health Standards (New Zealand)
ISO	International Standards Organisation
MAF	Ministry of Agriculture and Forestry (New Zealand)
MAP	Maximum Allowable Prevalence
MB	Methyl Bromide
QC	Quality Control
SBV	Sun Blotch Viroid (Avocado)
SI(E)	Senior Inspector (Exports)

DEFINITIONS

AQIS Inspection Lots	An inspection lot is any number of packages from one packer/exporter of the same BQA commodity presented for inspection at one time. Lines are rejected/accepted for export based on this inspection. This includes lines presented for inspection that will be subsequently split into separate consignments for export to several destinations in New Zealand.
Commodity	All species/varieties of produce which come under the one genus of plants and are treated by the same disinfestation treatment, are to be considered as one commodity. (i.e. rockmelons and zucchini are one commodity under the cucurbit group of plants - mandarins and lemons are one commodity under citrus).
Defect	Any unit of produce that is infested with critical and/or quarantine pests.
End Point Inspection	Product inspection carried out on an individual grower line basis following disinfestation treatments being undertaken. Lines are rejected/accepted for AQIS inspection based on the results.
Grower Line Consignments	A consignment consisting of only one BQA crop and from one grower.
Homogeneous	An identifiable lot of produce which has been produced in accordance with the directions in this Manual resulting in uniformity of treatment.
In - Line Inspection	A process where a packinghouse under AQIS Approved Certification Assurance (CA) Arrangements, has defined a sampling and inspection method, that meets the appropriate sampling plan required in this Manual, over a period of time during the packing process.
Interim Approval	Approval for a disinfestation treatment system which has been accepted in principal by MAF but not ratified as an approved treatment system pending additional research being concluded and accepted by MAF. Any commodity which has an "interim approved" arrangement, will if live fruit fly is found during on-arrival inspection in New Zealand, be suspended from export to New Zealand immediately.
Line	A group of produce that is homogeneous.
Mixed Line Consignments	A consignment, covered by a single phytosanitary certificate for one commodity but from more than one grower.

Monitoring	The actions undertaken to detect the presence of fruit fly or other Risk Group 2 pest/contaminant in the orchard area and/or to meet New Zealand's fruit fly area freedom specifications.
Pathway	A documented series of activities that, when carried out according to approved procedures, form a discrete and traceable system, from the grower to export loading point.
Phytosanitary Certificate	The certificate signed by an AQIS Inspector in accordance with the International Plant Protection Convention verifying that produce has been produced in accordance with the Australia - New Zealand BQA and the directions of this Manual and appropriately endorsed.
Risk Group 3 Pest	Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic effects on their production and/or environment (some importing countries prohibit the entryof the host commodity). An offical surveillance system is required for such pests in New Zealand.
Risk Group 2 Pest	Risk Group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.
Risk Group 1 Pest	Risk Group 1 pests are those regulated pests which on introduction into New Zealand could cause unaceptable economic impacts on the production of a commodity/commodities and/or the environment.
Secure Package	Any approved method that will minimise the risk of cross contamination, re-infestation or substitution of produce destined for New Zealand after it has been inspected and/or treated, to ensure it meets the New Zealand entry requirements.
Trade Samples	Are fruits which are being forwarded for market appraisal, packaging methods or other types of research work being investigated on a commercial scale by importers/exporters involved directly in the Australia - New Zealand trade.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a cluster).
Winter window	The winter window is effectively a treatment (Appendix 11 to the BQA) which allows access for host commodities of *Bactrocera cucumis* into New Zealand between 1 May and 30 September in any year.

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INTRODUCTION

SECTION 1. BACKGROUND

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements

The BQA is a formal agreement between the Australian Quarantine and Inspection Service (AQIS) and the New Zealand Ministry of Agriculture and Forestries (MAF), to ensure New Zealand's pre-export requirements are documented. This Manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The previous BQA had 15 appendices which related to each commodity being exported. For example Appendix 2 related to pome fruits and included responsibilities that must be followed by AQIS before certifying apples or pears for export to New Zealand.

AQIS/MAF have amended the BQA to include a series of appendices that describe the requirements for a particular treatment for fruit fly host material. This new BQA structure incorporates recent developments in relation to the documentation of New Zealand import health standards (IHS) on a commodity by commodity basis.

The major change which occurs between the "old" and the "new" import systems is that under the "old" BQA, MAF imposed a tolerance of 5 live eggs/larvae of fruit flies in one million units of produce. To meet that fruit fly tolerance, operational systems had to include additional grower and packer responsibilities to ensure that a very low level of infested material would be presented to AQIS for export inspection. With the incorporation of the new IHS and BQA systems, New Zealand have reviewed the tolerance levels for fruit flies and now consider disinfestation treatments that provide 32 insect survivors in one million treated insects (Probit 9 treatments) to be adequate security for their import Standards.

All approved fruit fly disinfestation treatments, as listed in this Manual, meet the required New Zealand disinfestation standards. Any new disinfestation treatments that industry may require to be investigated (particularly heat treatments), will need to meet the efficacy requirements of the New Zealand IHS systems.

The resultant change in emphasis by MAF means that the previous stringent grower and packer requirements are no longer mandatory for all treatment pathways* where an approved disinfestation treatment is applied. However, packinghouses who have some responsibilities delegated to them through treatments and exporter inspection arrangements, will still have responsibilities to fulfil to ensure New Zealand quarantine requirements are met. There will be much more emphasis placed on treatment centres, treatment centre operators, post treatment security and exporter requirements than was previously required.

*NOTE: growers of some commodities will still be required to undertake specific responsibilities where there are pests which are categorised as Quarantine Risk Group 2 and need field control programs as a treatment management option for this category of pest. For further information see Grower Responsibilities in Section 5 of this Manual.

Specific Changes to the BQA

Under the new BQA/IHS framework, AQIS/MAF have changed the emphasis of the appendices from commodities to treatment pathways. This means that for many commodities there are no longer mandatory requirements to document and undertake pre-treatment activities.

Procedures which may no longer be compulsory under the new BQA/IHS framework include;

. grower registration - (monitoring and spray diaries - unless specific controls are required for defined Quarantine Risk Group 2 pests).
. packer registration - (unless packer is packing defined Quarantine Risk Group 2 pest commodities, or is undertaking approved treatments of produce, or inspecting produce under exporter delegation).

NOTE: grower and/or packer registration may still be required where traceback to the "treatment" includes pest free production areas or non-host status treatment with special requirements (e.g. designated non-host status by variety).

The new BQA/IHS and the requirements of this Manual concentrate on the documented responsibilities of treatment of produce through to the export of the commodities, including security of the system once treatment has been undertaken and inspection procedures which must be undertaken to ensure accurate phytosanitary certification and consignment homogeneity.

For some fruit fly host commodities it will only be necessary to have an auditable system from the treatment operator and/or treatment facility, including post-treatment security procedures until the product is loaded for export shipping, which will safeguard against possible product reinfestation or substitution.

However, for other commodities where in-field controls are associated with the commodity being packed, an auditable system must be in place from grower through to export loading—as was the case under the "old" BQA systems.

1.2 Scope of the Manual

This Operational Manual is designed to ensure;

. only approved fruit fly host commodities are exported to New Zealand,
. homogeneity of fruit fly host produce consignments,
. approved treatments for fruit fly host produce are used,
. required levels and intensity of inspection of fruit fly host produce are maintained,
. security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce,
. records traceback to grower/packer/treatment centre (as appropriate),
. accurate phytosanitary certification is made in accordance with New Zealand requirements.

NOTE: all systems will be subject to random audits by the Canberra Office and all systems may be audited by New Zealand MAF at frequent intervals. The purpose of such audits will be to establish that the terms and conditions of the BQA/IHS are being met via the procedures agreed to and documented in this Manual, and will include measurement of pathway compliance from growers (where required) through to final export container loading and all associated documentation.

It is recommended that AQIS State Offices and State Departments of Agriculture (or equivalents), should also conduct management audits of the systems to ensure the State responsibilities are being adequately performed and recorded.

This Manual gives instructions for audit procedures and maintenance of records that will be the responsibility of AQIS State Offices, and where applicable State Departments of Agriculture or their equivalents (where these States still retain independent export inspection regimes), to implement and to take required corrective actions when non-conformities are identified.

The commodities and approved treatments that apply to fruit fly host produce are as follows;

	Commodity	**Treatments**	**Special Conditions**
.	Tomato	Dimethoate	Grower Registration
		Area Freedom	Nil
.	Cucurbits	Dimethoate - Approved treatment	Nil
		Dimethoate & in-field controls	Grower Registration
		Fumigation & in-field controls	Grower Registration
		Area Freedom	Nil
		Winter window	Grower Registration
.	Capsicum	Dimethoate	Grower Registration
		Area Freedom	Nil
.	Grape	Cold Storage	Grower Registration
		Area Freedom	Grower Registration
.	Pineapple	Non-Host status	Nil
.	Strawberry	Fumigation	Nil
		Area Freedom	Nil
.	Avocado	Cold Storage	Grower Registration
		Area Freedom	Grower Registration
.	Citrus	Cold Storage	QLD - Grower Reg.
		Area Freedom	QLD - Grower Reg.
.	Pear	Cold Storage	Nil
		Area Freedom	Nil

NOTE: all cartons of produce intended for export to New Zealand, whether grower registration is required or not, must be marked with some form of grower and packinghouse identification so that traceback can be undertaken to grower's properties.

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SECTION 2. PEST CATEGORIES

MAF have made some alterations to the previous pest lists that have been used in conjunction with BQA products. Some of these changes include amendments to pest classifications or categories. Industry and AQIS inspection staff should compare the new and old pest lists for each commodity (listed at Appendix 1 to this Manual) to become familiar with the new listings. Pest Lists are commodity specific and include reference to pests which are regarded as non-quarantine pests to enable additional direction to be given to inspection requirements.

Note: during any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Any pest detected which is not presently included in the Pest Lists **must** be reported to the Canberra Office immediately so that advice and categorisation can be made in conjunction with MAF New Zealand. The consignment must be held until a categorisation of the pest is made.

2.1 Pest Category Classifications

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS

Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which upon entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or would have significant economic effects on their production and/or environment (some importing countries prohibit the entry of the host commodity). An offical surveillance system is required for such pests in New Zealand.

Hosts of Risk Group 3 pests require approved disinfestation treatments to be undertaken in Australia and the establishment of operational systems which document the procedures which will be undertaken to ensure AQIS phytosanitary certification is meaningful and auditable by MAF.

The action taken by MAF should Risk Group 3 pests be detected on arrival in New Zealand will be to reship or destroy the offending consignment and to immediately suspend the export treatment pathway. For example, if an offending consignment is associated with dimethoate treatment, all dimethoate treatments would be suspended (not just the offending commodity), until an AQIS audit/investigation was completed and the results accepted by New Zealand.

The same rule applies to area freedom or non-host status treatment pathways.

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS

Risk Group 2 pests are those regulated pests which upon introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.

These pests/contaminants will require an Additional Declaration for Risk Group 2 pests on the phytosanitary certificate. The Additional Declaration will certify that some form of management

practice (eg. a pest control program in the field), has been carried out to ensure the consignment is free from the pest/contaminant of concern.

The action taken by MAF on interception of live Risk Group 2 pests will be to reship or destroy the offending consignment and immediately advise AQIS of the non-conformance. In some instances the consignment may be ordered for treatment (if an effective treatment is available). There will be no suspension of trade invoked for Risk Group 2 pests although AQIS will usually conduct a follow up audit to determine the cause of the system failure and to implement corrective action where possible.

Please see the individual commodity pest lists at Appendix 1 to this Manual for details of those commodities for which additional declarations are required for Risk Group 2 pests/diseases.

2.1.3 International Phytosanitary Certificate (IPC) Pests - Risk Group 1 - PESTS

Risk Group 1 pests are those regulated pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

The action taken by MAF on interception of live Risk Group 1 pests will be to allow the consignment to be treated if an approved treatment is available, or alternatively, the consignment will be reshipped or destroyed.

Should Risk Group 1 pests be detected during exporter/exporter delegate inspections, the consignment must be rejected and subject to corrective action before being presented for AQIS inspection.

In accordance with International Plant Protection Convention (IPPC) rules for the issuance of phytosanitary certificates, should any live Risk Group 1 pests be detected during AQIS inspection the consignment must be rejected and subject to corrective action (reprocessing, withdrawal of offending grower etc.), before being resubmitted for further inspection and certification.

2.2 Maximum Pest Levels

The inspection tolerances in Table 1 below ensure a 95% confidence that the given Maximum Allowable Pests (MAP) will not be exceeded for any category.

A selected sample size must be nominated by the exporter or exporter delegate prior to any inspection being undertaken. Once a sample number has been selected it cannot be varied and must then be used for all inspections covering that line/consignment. That is, the AQIS and MAF on-arrival inspections will all be conducted at the nominated sample size rate.

TABLE 1
INSPECTION TOLERANCE TABLE
SAMPLE SIZES - PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weedseeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 - 2000	520	0	≤ 7	0
2001 - 3000	550	0	≤ 7	0
3001 - 4000	560	0	≤ 7	0
4001 - 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

Pests listed as Non-regulated (non-quarantine) pests at Appendix 1 of this Manual have an unlimited tolerance during inspection. These pests are regarded as non-quarantine pests between Australia and New Zealand.

Note: during any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF. The offending consignment must be held until a categorisation is made.

2.3 Contaminants

Consignments contaminated with soil, or other potential carriers of regulated pests (eg. leaf litter) will not be permitted entry if the level of contamination is above the acceptable tolerance level. MAF Biosecurity Authority (Plants) Standard 152.02 – section 7.4 gives the following tolerances for soil and foliage contamination upon inspection of lots in New Zealand:

- Lots contaminated with soil in excess of 25g per 600 units sampled shall either be washed free of soil prior to release, reshipped or destroyed at the importer's option and expense.

- Lots contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped or destroyed at the importer's option and expense.

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SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS

3.1 Country freedom from fruit flies (based on NASS Standard 158.03.07)

FRUIT FLY PEST FREE AREAS IS KNOWN AS APPENDIX 1 TO THE BQA/IHS

Appendix 1 to the BQA/IHS refers to fruit flies that are considered to be exotic to Australia and which are not established here. e.g. *Bactrocera cucurbitae* (melon fly).

Through the Australian surveillance and monitoring program, managed by the National Plant Protection Office within AFFA (and consisting of exotic fruit fly trapping and monitoring regimes which are conducted at all international air and sea ports), Australia can claim and New Zealand will accept whole of Australia freedom from exotic fruit flies. There are no specific requirements or endorsements to the phytosanitary certificate required for this Appendix to the BQA.

The air and sea ports that are included in the trapping and monitoring regimes are listed below;

Northern Territory

Darwin	Gove	Groote

Queensland

Brisbane	Bundaberg	Cairns
Gladstone	Karumba	Mackay
Mourilyan Harbour	Thursday Island	Townsville
Weipa		

New South Wales

Coffs Harbour	Newcastle	Sydney
Wollongong	Yamba	

Victoria

Geelong	Melbourne/Westerport	Portland

South Australia

Adelaide	Ceduna	Port Augusta
Port Lincoln	Port Pirie	Whyalla

Western Australia

Albany	Broome	Bunbury
Carnarvon	Dampier	Derby
Esperance	Geraldton	Karratha
Perth/Freemantle	Port Hedland	Wyndham

Tasmania

Devonport/Burnie	Hobart	Launceston

3.2 Area freedom districts within Australia (based on NASS standard 158.03.06)

FRUIT FLY AREA FREEDOM IS KNOWN AS APPENDIX 2 TO THE BQA/IHS

The fruit flies that are referred to at Appendix 2 to the BQA are those fruit flies which are endemic to Australia, but for which various districts have, through trapping and monitoring programs, been able to establish area freedom from those flies. eg *Bactrocera tryoni*.

Area freedom from fruit flies is considered an approved treatment for those areas where approved trapping regimes are in place in accordance with the minimum Standards covered by the Australian Code of Practice for the Management and Control of Queensland Fruit Fly and where equivalent permanent trapping regimes are in place for Mediterranean fruit fly and Oriental species of fruit fly as stipulated in the New Zealand NASS Standard 158.03.06 and NASS Standard 158.03.07.

NOTE: should a fruit fly of any species (either alive or dead) be found during AQIS or Industry inspections in Australia, AQIS will inform the State Department of Agriculture responsible for the region supplying that fruit of the detection—AQIS will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.
Should a fruit fly of any species (either alive or dead) be found during New Zealand MAF on-arrival inspections, it will mean the suspension of all area freedom certification from all districts of Australia until an AQIS audit can be undertaken to determine the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on the results of the AQIS audit.

MAF have approved (under specific management criteria - New Zealand NASS Standard 158.03.06) a 15km radius suspension zone for a period of one generation plus 28 days (from when the last fly was caught) to be implemented around fruit fly outbreak sites in the Riverland (including the Riverland extension area and Mypolonga), Sunraysia, Tasmania and Riverina. A fruit fly outbreak will occur where either 2 male flies are detected within 400 metres within 14 days, 1 female fly is detected, or one or more larvae are detected.

Should, as a result of detection surveys, there be a situation where 2 outbreak sites are found between 1 - 3 kms apart, a 30 kms outbreak zone will be applied from a mid-distance between the outbreak sites. Where detections reveal two outbreak sites in excess of 3 kms apart, two 15 kms radii circles will be applied to each outbreak site.

NOTE: should a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

State Departments of Agriculture (or their equivalents) must report all fruit fly finds (including single fly detections) in the fruit fly area freedom zones to AQIS Canberra Office within 2 days of detection and identification. This information shall be passed onto MAF New Zealand at the earliest opportunity thereafter.

3.2.1 Approved area freedom districts

The following districts are recognised as being area free of all species of fruit fly as determined by trapping surveys and monitoring data forwarded by AQIS to MAF, and accepted by MAF as meeting their requirements under NASS Standards 158.03.06.

3.2.1.1 Riverina - MIA

This area covers the horticulture growing districts along the Murrumbidgee River (as well as the township of Hillston on the Lachlan River), and includes (but is not excluded to) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrandera and Darlington Point and the towns which are located between the above nominated towns.

Area (b) is the Hillston District.

Area (c) is the Menindee District.

3.2.1.2 Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and other areas around and between these towns.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and other areas between these towns.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and other areas between these towns.

3.2.1.3 Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri, Barmera, Waikerie and other areas between these towns.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, and includes the towns in between and the Shire of Mildura.

Area (i) the Mypolonga township surrounds.

3.2.1.4 Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

NOTE: in the event that "Area Freedom" is suspended within any of the above defined regions at any time, packinghouses who intend to pack both "area free fruits" and "suspension zone fruits" must develop written procedures to show how fruits from each area will be identified, segregated, processed, stored and documented. Fruits from "area free zones" and those needing physical or chemical treatments must be shipped as separate consignments and cannot be co-joined.

3.2.2 Registration requirements

TABLE 2
APPENDIX 2 TO THE BQA/IHS
AREA FREEDOM FROM FRUIT FLIES
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Avocado Grapes	Yes	Yes	Yes	Approved state surveys	Yes
All other commodities	Not required	Not required	Yes	Approved state surveys	Yes

Grower

- Growers of avacadoes must be registered with AQIS for the purpose of maintaining field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
- Growers of grapes must be registered for the purpose of maintaining field controls for the Risk Group 2 pest Conogethes punctiferales. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus.

- **Packinghouse**

- All products - packinghouses that are packing commodities for export to New Zealand under area freedom must be registered with AQIS because area freedom is considered to be a treatment.

While grower registration may not be mandatory, all packinghouses must provide a list of grower's names, addresses and allocated grower numbers for all produce that is being packed for the New Zealand market.

NOTE: in the event that fruit fly outbreak suspension zones are implemented within fruit fly area freedom districts, packinghouses must provide a list of growers who are in the declared quarantine suspension zone, and a list of growers who remain in the area freedom districts surrounding a suspension zone.

Treatment centre

There are no treatment centres associated with the area freedom pathway. Approved state government surveys are deemed to be the treatment.

Exporter

- All products - exporters of all commodities under area freedom must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 9 of this manual. Export documentation for these commodities must refer to Appendix 2 to the BQA.

All consignments must be directly traceable to the specific fruit fly area freedom district from which the produce was sourced. AQIS requires that grower numbers form part of the trade description requirements, and they will form a traceback mechanism should such be required.

3.2.3 Post treatment security - area freedom

All product being moved from an area freedom from fruit flies district, which is to be loaded for export outside that district, must be fully secured at all times.

Approved security measures for transporting of produce will include either;

. fully shrinkwrapping each pallet of produce (including the surface area between the bottom row of cartons and the actual pallet),
. fully enclosing each pallet with shademesh cloth with a maximum aperture of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),
. loading direct into panotech vans with units sealed by AQIS officers.

3.2.4 Post treatment transportation of product to export loading points

All consignments shipped out of Area Freedom Districts will be covered by either an AQIS EX 186 Transfer Certificate or EX 28 Notice of Intention to Export Certificate issued by the despatching AQIS office. Each consignment must be inspected on arrival in the receiving district by AQIS officers in that region to verify the security of the consignment/s.

Should inspecting officers find that the security of the consignment/s have been breached during transporting, the consignments must be rejected for area freedom certification. However, the rejected produce may be allowed disinfestation treatments, as directed in this Manual, as corrective action should the exporter choose this option.

3.2.5 Phytosanitary certification endorsements

General endorsement - 1

"The produce (name) in this consignment has been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The produce (name) in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific Endorsement - Avocado (refer to section 3.5 of this manual)

“The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid”.

Specific Endorsements - Tablegrapes (refer to section 3.5 and 11 of this manual)

“The grapes in this consignment have undergone approprite pest control activities that are effective against *Latrodectus hasselti* and *Conogethes punctiferalis*”.

"The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*":

NOTE: as an alternative to using the specific endorsement for *Latrodectus hasselti* (red back spider) above, the treatment may be placed in the treatment section of the phytosanitary certificate.

Specific Endorsement - Citrus fruits (refer to section 3.5 of this manual)

“The citrus (name) in this consignment have undergone appropriate pest control activities that are effective against *Guignardia citricarpa*”.

Specific Endorsement - Cucurbits, tomatoes & capsicums (refer to section 3.4 of this manual)

"The product (name) in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF".

3.3 Methyl bromide fumigation

METHYL BROMIDE FUMIGATION IS KNOWN AS APPENDIX 3 TO THE BQA/IHS

Strawberries and **watermelons** are the only commodities permitted to be exported to New Zealand under this treatment. If watermelons are grown for export to New Zealand under this treatment the additional conditions in section 3.10 of this manual must be met.

3.3.1 Registration requirements

Grower

- Strawberries - growers are not required to be registered for strawberries that are grown for export under this treatment.
- Watermelons - growers of watermelons must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the watermelons. Refer to section 3.10 of this manual for field control requirements.

Packinghouse

- Strawberries - packinghouses are not specifically required to be registered for strawberries under this treatment.
- Watermelons - packinghouses that are packing watermelons must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises.

Treatment centre

- Strawberries and watermelons - fumigation treatment centres must be registered with AQIS for treatment of New Zealand BQA produce. Fumigations must be performed by persons that have been licensed for this purpose. Treatment details and fumigator responsibilities are detailed in section 3.3.2 and section 8 of this manual.

Exporter

- Strawberries - exporters of strawberries under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed in section 9 of this manual. Export documentation for strawberries must refer to Appendix 3 to the BQA.
- Watermelons - exporters of watermelons under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed in section 9 of this manual. Export documentation for watermelons must refer to Appendix 3 to the BQA.

☞ Strawberries and watermelons cannot be combined as one consignment. This is because both come from distinctly different pathways (ie, strawberries only require fumigation while watermelons require both fumigation and in-field controls).

NOTE: should live fruit fly be found during AQIS or Exporter inspections following treatment, the fumigation centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the methyl bromide treatment pathway will be suspended immediately for all Australian products until an AQIS audit can be undertaken to determine the reasons for such failure, and MAF accept these findings.

3.3.2 Treatment details and fumigator responsibilities

All fumigations must be performed with the amount of product space equal to less than 50% of total air space within the chamber or tent. Fumigation treatment requirements are as detailed in Table 4 below.

TABLE 4
METHYL BROMIDE FUMIGATION
TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21 - 26°C and above	32g/m^3	Watermelon - 4 hours
15°C and above	48g/m^3	Strawberry - 3 hours

In addition to the normal AQIS registration requirements pertaining to fumigation centres, the following additional requirements must be in place before registration for the New Zealand program is permitted.

All BQA/IHS produce required to be fumigated must be managed in accordance with the following process controls. Fumigation treatment centres must be able to demonstrate at all times that the following requirements are being met:

1. Incoming product identification.
2. Segregation from other produce and clearly marked “New Zealand”
3. The treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment. ie Treatment batch numbers relating to incoming consignments or equivalent recording systems will be required.
4. Documented treatment records
5. How measuring equipment is calibrated, and how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.
9. If required, maintenance of inspection facilities on the premises.

In accordance with the above requirements, fumigation treatment facilities must develop a set of procedures that clearly define the responsibilities and work duties of all staff involved in the fumigation of watermelons or strawberries.

It is recommended that fumigation establishments write procedures for each of the above requirements, detailing who is responsible for the activity (it can be more than one person as long as all persons know their duties in each category), when the activity is done, what records are made and where these records will be filed.

With regard to Item 3 above, it is recommended that individual procedures accompanied by work instructions be written to define the processes and controls on the processes. The following criteria should be considered:

- within process control, mention must be made as to how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent, and
    - define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.
- how many fruits will be sampled to measure lowest flesh temperature of product?
- if tent fumigation is being performed, by whom and when is the tent checked for holes/tears?
- who, how and when is temperature measuring equipment calibrated? How is this recorded?
- where are in-process gas monitoring lines located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?
- who calculates and who checks required fumigation dosage rate once temperature and volume are calculated?
- how is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?
- who is responsible for checking that the correct amount of fumigant is entered into the chamber/tent?
- what procedures are applied to ensure no leaks from the chamber or tent are evident?
- what period of time after initial fumigant is released into the chamber/tent will verification readings be made, and using what type of equipment?
- calibration of gas measuring equipment is undertaken how frequently and who does this? Calibration details are recorded where?
- at completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?
- who has the authority to sign off the treatment certificates to enable release of produce?
- how is treated product identified as being treated?

All processes undertaken by fumigation treatment centres for New Zealand trade should have written procedures, and the system should be such that it can always stand up to audits.

All fumigations which are undertaken using flexible tent capacities will be subject to AQIS supervision and monitoring procedures to ensure that the requirements as directed above are being undertaken effectively. Fumigations performed in fixed capacity chambers or tents will be monitored by AQIS at frequent intervals during the fumigation season.

It is recommended that treatment centres, when making application for registration for the New Zealand trade, should submit a process control procedures manual for AQIS assessment so that registration and process controls can be assessed and approved simultaneously.

NOTE: although growers and packinghouses associated with strawberry production and packaging do not need to be formally registered for the New Zealand export program, each package of fumigation treated product must be clearly marked with some form of grower and packinghouse identification, along with the exporter's name and address.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on the Transfer Certificate (EX 186) or Notice of Intention to Export/Export Permit (EX 28) and signed off by an AQIS approved officer.

NOTE: Senior Inspectors (Exports) may approve variations to the above documentation requirements to suit a particular State's operating requirements, and the use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is to be

used, it is recommended that audits of such systems be undertaken frequently enough to enable confidence within the systems.

3.3.3 Post treatment security - methyl bromide fumigation

Immediately following labelling of packaging, produce must be secured by either:

- shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet), or
- shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom, or
- coolstoring unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product, or
- coolstoring protected in secure packages at any temperature.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the State of operation for assessment and approval.

3.3.4 Post treatment transportation of product to export loading point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on treatment centre premises.
- supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.
- documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.
- the nominated person can be either the exporter's delegate or the operator of the treatment establishment.
- the exporter or the exporter's delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.
- the exporter or the exporter's delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,
    - if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce or the untreated produce must be properly secured.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.3.5 Phytosanitary certificate endorsements

General endorsement - 1

Strawberries

"The strawberries in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

Watermelons

"The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The produce (name) in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific endorsement - watermelons

"The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

3.4. Dimethoate dip/spray

DIMETHOATE DIPPING/SPRAYING IS KNOWN AS APPENDIX 4 TO THE BQA/IHS

Tomatoes, **capsicums**, **zucchinis**, **rockmelons**, **honeydew melons**, **cucumbers** and **scallopinis** are the only commodities permitted to be exported to New Zealand under this treatment. In addition, when capsicums, honeydew melons, tomatoes, cucumbers and scallopinis are grown for export to New Zealand under this treatment the conditions in section 3.10 of this manual must be met.

3.4.1 Registration requirements

Grower

- Tomatoes - growers of tomatoes must be registered with AQIS for two reasons; 1) because only certain varieties of tomatoes are permitted to be exported to New Zealand under this treatment **(the five permitted varieties of tomatoes are; Floradade, Sunny, Duke, Hayslip and Tristar)**; and, 2) for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the tomatoes [please refer to section 3.10 of this manual]. Tomato growers must include in their registration application a map showing all blocks in which permitted tomato varieties are grown. Reference to individual blocks on this map will be made on the tomato variety declaration, at appendix 3.10 of this manual, for each consignment of tomatoes delivered to registered packinghouses.
- Capsicums - growers of capsicums must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the capsicums. Please refer to section 3.10 of this manual.
- Zucchinis - growers are not required to be registered for zucchinis that are grown for export under this treatment.
- Rockmelons - growers are not required to be registered for rockmelons that are grown for export under this treatment.
- Honeydew melons - growers of honeydew melons must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the melons. Refer to section 3.10 of this manual for field control requirements.
- Cucumbers - growers of cucumbers must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the cucumbers. Refer to section 3.10 of this manual for field control requirements.
- Scallopinis - growers of scallopinis must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the scallopinis. Refer to section 3.10 of this manual for field control requirements.

Packinghouse

- Tomatoes - packinghouses that are packing tomatoes must be registered with AQIS for two reasons; 1) because only certain varieties of tomatoes are permitted to be exported to New Zealand under this treatment; and,2) their responsibilities for maintaining security of the product whilst it is on the packing premises. Tomato packinghouses are not permitted to pack/treat tomatoes for New Zealand unless they have grower declaration forms showing that the tomatoes are one of the five varieties permitted to undergo dimethoate treatment for export to New Zealand. To help reduce the possibility of non-approved tomato varieties being inadvertently included in consignments destined for New Zealand, the approved tomato variety **must** be shown (eg. stamped) on all export tomato cartons. It is recommended that differentiation of export and domestic cartons also be implemented. This already occurs in many instances, for example, different trading names/colours are used for domestic and export cartons.

- Capsicums - packinghouses that are packing capsicums for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Refer to section 3.10 of this manual for requirements.
- Zucchinis - Packinghouses are not specifically required to be registered for zucchinis that are being packed for export to New Zealand under this treatment.
- Rockmelons - packinghouses are not specifically required to be registered for rockmelons that are being packed for export to New Zealand under this treatment.
- Honeydew melons - packinghouses that are packing honeydew melons for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Refer to section 3.10 of this manual for requirements.
- Cucumbers - packinghouses that are packing cucumbers for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Refer to section 3.10 of this manual for requirements.
- Scallopinis - packinghouses that are packing scallopinis for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Refer to section 3.10 of this manual for requirements.

Treatment centre

- All products - dimethoate dip/spray treatment centres must be registered with AQIS for treatment of New Zealand BQA produce. Treatment details and treatment centre responsibilities are detailed in section 3.4.2 and section 8 of this manual.

Exporter

- Cucurbits - exporters of these commodities under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 9 of this manual. Export documentation for these commodities must refer to Appendix 4 to the BQA.
- Capsicums and tomatoes- exporters of these commodities under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 9 of this manual. Export documentation for these commodities must refer to both Appendix 4 and Appendix 10 to the BQA.

☞ Commodities can only be combined to make up a single consignment if they have come from the same treatment pathway. That is, zucchinis and rockmelons can be combined as they have a common treatment pathway; and capsicums, cucumbers, tomatoes, scallopinis and honeydew melons can be combined as they have a common treatment pathway.

Not withstanding that growers and packinghouses of rockmelons and zucchinis need not be specifically registered for the New Zealand program, each package of produce treated under this Section of the Manual will be marked in some way to identify the grower and packinghouse, and must be labelled with the exporter's name and address.

NOTE: should live fruit fly be found during AQIS or exporter inspections following treatment, the dipping treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the dimethoate treatment pathway will be suspended immediately for all Australian products until an

AQIS audit can be undertaken to determine the reasons for such failure, and MAF accepts the findings of this audit

3.4.2 Treatment details and treatment centre responsibilities

Dimethoate dipping/spraying requirements are as detailed in table 5 below.

TABLE 5

PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES FOR COMMODITIES EXPORTED UNDER APPENDIX 4 TO THE BQA

Commodity	Dip strength	Tolerance	Dip/spray	Time
Tomato	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Tomato	400ppm	±6% (±24ppm)	Spray	Spray for at least 10 seconds, and remain wet for at least 1 minute
Capsicum	400ppm	±6% (±24ppm)	Spray	Spray for at least 1 minute
Zucchini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Rockmelon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Cucumber	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Scallopini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute

Treatment centres using dimethoate sprays/dips for New Zealand produce must be registered with AQIS for this purpose. When applying for registration, treatment centres should present a procedures manual detailing how their process controls will be implemented. The details of process controls that must be in place are as follows:

- that purchase of bulk chemical be from fresh stocks and certainly made from stock which is not older than 18 months,
- how chemical is be stored at temperatures below 40°C, as it has been determined that at temperatures above 46°C (for even 1 day), the active ingredient will degrade and solution strength will be lessened.
- the use of oils or waxes during the preparation of product prior to the chemical dipping treatment is prohibited.
- all product being treated with chemical dip will be free of soil.
- the chemical dipping process must be the last preparation process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted, following dip treatment.
- the packinghouse/treatment centre will nominate a person/s to undertake the making up of dimethoate solutions and the recording of each consignment or batch lot that is treated and packed for New Zealand;
    - the nominated person/s must satisfy an AQIS authorised officer/inspector they are able to correctly determine the make up of chemical solution strengths, before a packinghouse/treatment centre will be permitted by AQIS to chemically dip/treat fruits destined for the New Zealand market.
- the packinghouse/treatment centre will make up chemical solutions immediately prior to use and will have systems in place for recording solution strengths. The packinghouse or treatment centre will also record details of the mixing of the solution and any topping up of the solution during processing which allows for chemical wash out. Details will include the times and indicate volumes of product treated at the time of topping up.

- each treatment operator will be required to document their method/s of dipping and will include:
    - size of the dip tank,
    - method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc),
    - maximum volume of water required for any/each treatment,
    - amount of chemical needed to achieve the required ppm level active ingredient,
    - minimum allowable solution level,
    - maintenance of active ingredient level (i.e. "top up" levels).
- treatment operators will have an identification system in place which must identify treated products from untreated products and these must be placed on pallets/bins/crates etc in a clear, reasonably permanent manner.
- after dipping as many packages/crates as possible, product must be marked/identified as being "treated".

NOTE: when the processing of any batch is completed, the solution will be completely disposed of. Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems that can demonstrate that they are able to carry over solutions to a following day without losing effectiveness of the chemical solution.

3.4.3 Post treatment security - chemical dipping/spraying

Immediately following labelling of packaging, produce must be secured by either:

- shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet), or
- shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom, or
- coolstoring unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product, or
- coolstoring protected in secure packages at any temperature.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the State of operation for assessment and approval.

3.4.4 Post treatment transportation of product to export loading point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on treatment centre premises.
- supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.
- documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.
- the nominated person can be either the exporter's delegate or the operator of the treatment establishment.
- the exporter or the exporter's delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.

- the exporter or the exporter's delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,
    - if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce or the untreated produce must be properly secured.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.4.5 Phytosanitary certificate endorsements

General endorsement - 1

Cucurbits

"The produce (name) in this consignment has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

Capsicums and tomatoes

"The produce (name) in this consignment has been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

All commodities

"The produce (name) in this consignment has been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

General endorsement - 3

All commodities

"The produce (name) in this consignment has undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

Specific Endorsement - Tomato

“This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia”.

NOTE: it is permissable to use one instance of each of the above additional declarations on a phytosanitary certificate to cover a number of commodities. For example, if capsicums and tomatoes were combined as a consignment, General endorsement - 1 would read…"The capsicums and tomatoes in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

3.5 Cold Storage

COLD STORAGE IS KNOWN AS APPENDIX 5 TO THE BQA/IHS

Citrus fruits, **pears**, **tablegrapes** and **avocadoes** are permitted to be treated by cold storage disinfestation for export to New Zealand.

3.5.1 Registration requirements

Grower

- Citrus fruits - growers of citrus fruits in Queensland must be registered with AQIS for the purpose of maintaining field controls for the Risk Group 2 pest *Guignardia citricarpa* (citrus black spot). State departments in the other states survey for citrus black spot, negating the need for grower registration.
- Pears - growers are not required to be registered for pears that are grown for export under this treatment.
- Tablegrapes – grower of grapes must be registered for the purpose of maintaining field controls for the Risk group 2 pest Conogethes punctiferales (yellow peach moth). AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus (hibiscus mealybug).
- Avocadoes - growers of avocadoes must be registered with AQIS for the purpose of maintaining field controls in accordance with New Zealand requirements for the Quarantine Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.

Packinghouse

- Citrus fruit - packinghouses that are packing Queensland citrus fruits for export to new Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Packinghouses in other states are not specifically required to be registered.
- Pears - packinghouses are not specifically required to be registered for pears that are being packed for export to New Zealand under this treatment.
- Tablegrapes - packinghouses are not specifically required to be registered for tablegrapes that are being packed for export to New Zealand under this treatment. It should be noted that tablegrape exports are required to undergo mandatory fumigation for the health pest *Lactrodectus hasselti* (Australian red-back spider). If packinghouses are undertaking this fumigation they must be registered for that purpose - refer to section 11 of this manual.
- Avocadoes - packinghouses that are packing avocadoes for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises.

Treatment centre

- All products - cold disinfestation treatment centres must be registered with AQIS for treatment of New Zealand BQA produce, as required under the Export Control Act and Fresh Fruits and Vegetable Orders. Treatment details and treatment centre responsibilities are detailed in section 3.5.2 and section 8 of this manual.

Exporter

- All products - exporters of these commodities under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 9 of this manual. Export documentation for these commodities must refer to Appendix 5 to the BQA.

NOTE: should live fruit fly be found during AQIS or Exporter inspections following treatment, the cold storage treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the cold storage treatment pathway will be suspended immediately for all Australian products until an AQIS audit can be undertaken to determine the reasons for such failure and MAF accept the findings of this audit.

3.5.2 Treatment details and treatment centre responsibilities

Table 6 below details the permitted temperature and times for cold storage disinfestation treatments.

TABLE 6
APPROVED COLD STORAGE
DISINFESTATION TREATMENTS

Commodity	Temperature	Period
Pear, tablegrape, citrus fruits (option 1)	≤ 0°C	13 days
Pear, tablegrape, citrus fruits (option 2)	1°C (± 0.6°C)	16 days
Avocadoes	1°C (± 0.2°C)	16 days

3.5.2.1 Cold disinfestation procedures

Registered treatment centres must have documented procedures in place for receival, identification by grower and packinghouse, segregation of all New Zealand destined fruits and marking/labelling all New Zealand BQA/IHS produce.

The following specific requirements must be in place to enable cold storage treatment centres to become registered for the New Zealand program:

- minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of fruit or less. For each additional 250 cu.m. of fruit, or part thereof, one additional pulp sensor will be used.
- thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to staff using this equipment for temperature checks.
- the warmest area of each coolstorage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One sensor will be placed in fruit pulp at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors.

3.5.2.2 Temperature recording

The following temperature recording requirements must be available before treatment centres will be registered for the New Zealand trade in BQA/IHS commodities:

- Continuous - strip charts or data log sheets will be held for each cold treatment batch. Note: temperature recorders must be capable of monitoring fruit pulp temperatures—Ryan, Cox or similar air temperature recorders are not acceptable.
- Intermittent - sensor temperatures will be manually recorded twice daily (morning and afternoon) for each day of the cold treatment and verified once every 4 days by an AQIS authorised officer.

Temperature records will be retained for auditing purposes by AQIS/MAF

NOTE: where the refrigeration unit is equipped with a print out recorder, the AQIS inspector will initiate the treatment when the treatment chamber has stabilised at the required temperature. When cold disinfestation treatment is completed, the AQIS inspector will sign that the treatment has been satisfactorily undertaken and the records covering the treatment will be copied with one copy being retained by the treatment facility and the second copy being retained by the AQIS inspector and filed.

3.5.2.3 Record requirements

Details required to be recorded include;

- date and results of sensor/probe calibrations
- date chamber was loaded with produce
- type and variety of produce treated, the quantity by lots involved, all to be identified by packinghouse and exporter.
- date the maximum pulp temperatures initially recorded 1°C ± 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded or date the pulp temperature of the fruit within the chamber recorded 13 days at 0° or below or equivalent.
- either continuous print out records or records of a.m. and p.m. temperatures within the chamber on a daily basis throughout the treatment program.
- date produce was cleared from chamber with details of post treatment security and dispatch of produce.
- date and results of re-calibration of sensors following completion of treatment.

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of treated produce whilst on their premises.
- supervision of loading and unloading of all consignments into and out of their premises, identifying and segregating those consignments intended to be treated for New Zealand.
- documenting all incoming and outgoing produce that is intended to be exported to New Zealand.
- the nominated person/s can be either the exporter's delegate or the operator of the treatment establishment.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or product substitution can occur for New Zealand destined produce.
The exporter or the exporter's delegate will ensure that the transport medium is clean and that other products (i.e. unsecured packages of untreated commodities) that could cause cross infestation of cleared produce are not to be loaded without taking appropriate security precautions.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.5.2.4 Auditing requirements – cold storage disinfestation centres

The Senior Inspector (Exports) will be responsible for arranging an audit schedule for cold disinfestation centres and will consider the number and size of treatments being undertaken in determining frequency of audits. It is recommended that each cold disinfestation treatment centre should be audited at least twice during the operating season.

Audits will cover the receival (packer – exporter lots), segregation, identification and treatment of batches and the recording and despatch records, security arrangements when product is loaded, for all treated produce.

3.5.3 Post treatment security - cold storage disinfestation

Once cold-disinfestation treatment has completed, the product must be maintained in such a way so as to ensure reinfestation cannot occur.

3.5.4 Post treatment transportation of product to export loading point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on treatment centre premises.
- supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.
- documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.
- the nominated person can be either the exporter's delegate or the operator of the treatment establishment.
- the exporter or the exporter's delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.
- the exporter or the exporter's delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,
    - if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce or the untreated produce must be properly secured.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.5.5 Phytosanitary certificate endorsements

General endorsement - 1

"The produce (name) in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian

Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The produce (name) in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific endorsement - Avocadoes

“The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid”.

Specific endorsement - Tablegrapes

“The grapes in this consignment have undergone approprite pest control activities that are effective against *Latrodectus hasselti* and *Conogethes punctiferalis*”.

"The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*":

Specific endorsement - Citrus

“The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa*”.

NOTE: the States of South Australia, New South Wales and Victoria, through their Departments of Agriculture, conduct surveys for *Guignardia citricarpa*, and these States are considered free of this disease at this time. The above additional declaration, however, must be inserted on all phytosanitary certificates for citrus fruits regardless of origin.

3.6 Non host status

NON-HOST STATUS IS KNOWN AS APPENDIX 6 TO THE BQA

Some commodities are agreed to by MAF as having non-host status. **Pineapples of the smooth cayenne variety** are fruits which are regarded as a non-host of endemic Australian fruit flies and can be shipped under the BQA subject to normal AQIS inspection and phytosanitary certification. It is important to note that non-host status applies only to Australian endemic species of fruit flies and therefore, should Australia have an incursion of an "exotic" species of fruit fly for which pineapple may be a host, this Appendix to the BQA may be suspended until the fly is eradicated.

3.6.1 Registration requirements

Grower

Growers are not required to be registered for smooth cayenne variety pineapples that are grown for export under this treatment. However, growers of pineapple consignments being shipped to New Zealand must have records which can verify the variety of pineapple to be of smooth cayenne parentage.

Packinghouse

Packinghouses are not specifically required to be registered for smooth cayenne variety pineapples that are being packed for export to New Zealand under this treatment.

Not withstanding the above, all packages of non-host produce being exported under appendix 6 to the BQA must be clearly marked with some form of grower and packinghouse identification, and exporter's name and address.

Treatment centre

There are no treatment centre requirements.

Exporter

Exporters of smooth cayenne variety pineapples under this treatment must be registered for this purpose. Export documentation for this commodity must refer to Appendix 6 to the BQA.

3.6.2 Treatment details and treatment centre responsibilities

Nil requirements

3.6.3 Post treatment security - non-host status commodities

All smooth cayenne variety pineapples must be secured and protected against substitution or malpractice at all times during transit of fruits which are destined for New Zealand.

3.6.4 Post treatment transportation of product to export loading point

Exporters are required to ensure that adequate security from point of loading ex packinghouse through to final export loading has been delegated or undertaken directly by the exporter. Records must be kept throughout any transport movement of non-host products.

3.6.5 Phytosanitary certificate endorsement

General endorsement - 1

"The pineapples in this consignment has been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The pineapples in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

3.7 Heat Treatments

HEAT TREATMENTS ARE KNOWN AS APPENDIX 7 TO THE BQA

Australia is not permitted to use heat treatment disinfestation methods for fruit fly host materials exported to New Zealand at this time.

Heat treatments such as vapour heat treatment (VHT) and high temperature forced air (HTFA) are recognised treatments for some commodities however, at this time, Australia has not submitted any efficacy data to MAF seeking approval of VHT or HTFA as approved treatments for all nominated fruit flies for any Australian commodities.

NOTE: Australian disinfestation work for VHT has only been conducted with relation to Queensland and Mediterranean fruit flies.

Should any heat treatments be approved by MAF in the future, requirements and conditions will be included in this Manual at that time.

3.8 Nil

There is no treatment associated with appendix 8 to the BQA.

intentionally left blank

3.9 Nil

There is no treatment associated with appendix 9 to the BQA.

intentionally left blank

3.10 Field control programmes

FIELD CONTROL PROGRAMMES IS KNOWN AS APPENDIX 10 TO THE BQA/IHS

The field control programmes referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies**.

This Appendix is intended to be used in combination with other appendices rather than as a stand-alone treatment. For example, cucumber exports to New Zealand under the dimethoate dip treatment require both a post-harvest dip and pre-harvest field control programme— a combination of both Appendix 4 and Appendix 10 to the BQA.

The treatment/commodity combinations which require reference to this section of the manual are:

Section - treatment	**Commodity**
3.3 - Methyl bromide fumigation	Watermelon
3.4 - Dimethoate dip/spray	Capsicum, scallopini, cucumber, honeydew melon, tomato
3.11 - Winter window	Rockmelon, honeydew melon, cucumber, watermelon

3.10.1 Grower responsibilities

Growers of produce that requires in-field controls must be registered with AQIS for this purpose. Application for registration will be made to the AQIS office in the grower's region. To ensure there are no delays with processing and implementing registrations it is recommended that applications be forwarded to AQIS no later than 6 weeks before the anticipated harvest of the first crop. Applications must include a property map showing those blocks in which the relevant BQA commodities are to be grown.

Upon receipt of the Application, AQIS inspection staff will visit the property to validate blocks and crops and ensure the grower/s is/are aware of their responsibilities and issue the grower with a grower registration number. AQIS will undertake audits of grower properties throughout the growing/harvesting season. All audits of growers will be charged to the packinghouse that is packing the grower's fruits/vegetables.

Growers must commence applying recommended field controls at least 4 weeks prior to first harvest for New Zealand. Growers are required to conduct field monitoring and keep spray diary records for all activities relating to each block registered for the New Zealand program. A cucurbit grower declaration form (appendix 3.15 to this Manual) must be completed for each consignment of cucurbits to be exported to New Zealand in combination with appendix 10 to the BQA.

NOTE: the Queensland Department of Primary Industries (QDPI) has issued a Farm Note (F76/DEC92) which covers the requirements for field control programs against infestation of *Bactrocera cucumis*. This Farm Note will be the minimum Standard that AQIS will be measuring compliance against. Variations of recommendations in this Standard in regard to the application of sprays will only be permissable when using an AQIS approved crop monitor. All activities relating to field controls must be recorded and held on file for a 12 month period.

AQIS will monitor regularly and audit growers at intervals throughout the season to ensure compliance with the above requirements. Details of these audits can be found in section 4 of this manual.

Because the field control programme is an integral part of the overall treatment for certain commodities, post-harvest security of the produce must be maintained at all stages.

3.10.2 Packinghouse responsibilities

Packinghouses supplying commodities to New Zealand under Appendix 10 to the BQA will be registered for this purpose. Packinghouses must maintain a register (names, addresses and grower numbers) for all growers supplying commodities under this Appendix.

Packinghouses must identify produce receivals immediately as they arrive, and the product must be secured and segregated from all other produce, regardless of whether these other commodities are for export or domestic markets.

Produce packed under Appendix 10 must be packed as discrete lots and cannot be packed for the New Zealand program if any "non-field controlled produce" is located within the premises.

Packinghouses (if delegated responsibility by the exporter) will undertake a grower line inspection (600 units) for each grower making up a consignment. Persons undertaking these inspection procedures must be aware of the New Zealand pest lists for these commodities and be experienced in inspection duties. Records of these inspections (see Appendix 3.4) must be

Following packing, the produce must be immediately secured against possible reinfestation or cross- contamination. Security can be effected by one or more of the following means;

- produce is packed into non-ventilated cartons with gaps on the carton flaps not to exceed 1.6 mm. at any point,
- cartons/pallets can be put into discrete storage areas including cool or controlled temperature rooms,
- cartons/pallets can be covered by tarps or shade mesh cloth that are sandbagged to floor areas,
- shrinkwrapping of all cartons/pallets.

Should any treatment operator/packinghouse wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the state of operation for assessment and approval.

AQIS will monitor regularly and audit packinghouses at intervals throughout the season to ensure compliance with the above requirements. Packinghouses who are found to not be complying with identification, packing and final product security will be suspended from the program immediately.

As a general rule, existing packinghouses will be audited on an annual basis at a minimum. Packinghouses that have not recently packed for the New Zealand BQA, or who have just commenced packing for the BQA will be audited on a monthly basis in the first season. After this initial season auditing frequency may be reduced at the Senior Inspector (Exports) discretion.

3.10.3 Treatment centre responsibilities

The responsibilities of the methyl bromide fumigation and dimethoate dip/spray treatment centres are detailed in sections 3.3, 3.4 and 8 of this manual.

3.10.4 Exporter responsibilities

Exporters of commodities that require field control programmes must be registered with AQIS for this purpose. Exporter responsibilities are detailed in section 9 of this manual.

In particular, exporters are responsible for ensuring that the security of produce during all phases of transportation cannot be breached and that the produce cannot be reinfested or substituted. Produce that is to be transported to another destination for export loading must be strictly secured. The transport must be clean and not carrying any unprotected fruit fly host commodity. That is, either the other commodities are secured (shrinkwrap or similar) or the field control produce must be secured.

3.10.5 Phytosanitary certificate endorsements

Endorsements for these commodities can be found at sections 3.3, 3.4 and 3.11 of this manual.

3.11 Winter Window – Field control systems Approach

"WINTER WINDOW" ACCESS IS KNOWN AS APPENDIX 11 TO THE BQA/IHS

A "winter window" access period has been negotiated between MAF New Zealand and AQIS, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly). The "winter window" therefore specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment of these commodities. The access period is for those cucurbits exported (arriving in New Zealand) between **1 May and 30 September in any year**.

Although cucurbits require no post-harvest treatments for cucumber fly for "winter window" access, additional fruit flies have been listed as Risk Group 3 pests for most cucurbits. Area freedom for these other flies must be established before these commodities can be exported to New Zealand under this appendix.

Accordingly, **rockmelons, honeydew melons** and **cucumbers** can be exported under this appendix, but only from the states of Queensland, New South Wales, Victoria and Tasmania (for which area freedom from Mediterranean fruit fly has been established).

As cucumber fruit fly is the only Risk Group 3 pest listed for **watermelons**, this commodity can be exported under this appendix from all areas in Australia.

Because Queensland fruit fly has been listed as a pest of **zucchinis** and **scallopinis** (in addition to Mediterranean fruit fly and cucumber fruit fly), zucchinis and scallopinis can only be exported from areas where area freedom from both Meditteranean fruit fly and Queensland fruit fly has been established (that is, the Riverland, Sunraysia, MIA-Riverina and Tasmania). Exports of zucchinis or scallopinis from these areas should therefore be referenced to Appendix 2 to the BQA (fruit fly area freedom), rather than Appendix 11.

Should live fruit fly infestation be found in New Zealand the consignment will be reshipped, destroyed or subject to treatment at the New Zealand Ministry of Agriculture and Forestry – Chief Plants Officer's discretion (on a case by case basis).

3.11.1 Registration requirements

Grower

- All products - growers of "winter window" commodities must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the product. Please refer to section 3.10 of this manual.

Packinghouse

- All products - packinghouses that are packing "winter window" produce for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Please refer to section 3.10 of this manual.

Treatment Centre

- All product - there are no treatment centres associated with the "winter window" pathway.

Exporter

- All product - exporters of "winter window" commodities must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 3.10 and section 9 of this manual. Export documentation for these commodities must refer to Appendix 10 and Appendix 11 to the BQA.

☞ Rockmelons, watermelons, honeydew melons and cucumbers can be combined to make a single consignment, as all commodities have a common treatment pathway.

3.11.2 Treatment details and treatment centre responsibilities

There are no treatment centres associated with "winter window" trade.

3.11.3 Product security

Packinghouses must identify "winter window" receival immediately as they arrive, and the product must be secured and segregated from all other produce, regardless of whether these other commodities are for export or domestic markets.

Following packing, the produce must be immediately secured against infestation or cross-contamination. Security can be effected as detailed in section 3.10 of this manual.

3.11.4 Transporting and loading into export containers

If product is to be loaded into export containers at the packing premises, the packinghouse will ensure that there is minimum time delays in moving fruits/vegetables from the secure area into the container/s. Product should not be left in an unsecure environment for more than 15 minutes. This should enable the packinghouse to attend to any trade description requirements, which may need to be applied before final loading.

“Winter window” fruits/vegetables which are to be transported to another destination for export loading must be subjected to strict security provisions. The transport must be clean and not carrying any unprotected fruit fly host commodity. That is, either the other commodities are secured (shrinkwrap or similar) or the “winter window” produce must be secured.

The exporter must delegate nominated persons to ensure security of produce will be maintained and the nominated persons must acknowledge and accept these responsibilities in writing.

The receival depot or centre must be able to unload the “winter window” fruits/vegetables quickly and secure the produce immediately on arrival. Security will be as indicated in Section 3.10.2 above.

The receival depot/centre will, when loading the fruits/vegetables into a final destination container, ensure the movement of fruits during loading will cause minimum time delays to ensure the produce is not exposed to the environment for any period exceeding 15 minutes.

AQIS will audit receival depot/centres at least monthly to ensure compliance is being maintained. Additional audits may be undertaken at the discretion of the Senior Exports Inspector.

3.11.5 Phytosanitary Certification

General endorsement - 1

"The cucurbits (name) in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The cucurbits (name) in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

General endorsement - 3

"The cucurbits (name) in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

NOTE: it is permissable to use one instance of each of the above additional declarations on a phytosanitary certificate to cover a number of commodities. For example, if watermelons, honeydew melons and cucumbers were combined as a consignment, General endorsement - 1 would read…"The watermelons, honeydew melons and cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

3.12 Irradiation treatment

IRRADIATION IS ALSO KNOWN AS APPENDIX 12 TO THE BQA

Irradiation treatments are still under development, and as such, Australia is **not** permitted to use irradiation treatment on fruit fly host materials exported to New Zealand at this time.

Should irradiation treatments be approved by MAF in the future, requirements and conditions will be included in this manual.

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Attachment 1 to Section 3 – Summary of requirements for access of fruit fly host commodities into New Zealand from Australia

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Avocado	Area freedom	□	□	□		□	- "The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid"
Avocado	Cold storage 1°C (±0.2°C) for 16 days	□	□	□	□	□	- "The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid"
Banana	**Export prohibited**						
Capsicum	Area freedom	□	□	□		□	- "The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF".

COMMODITY	TREATMENT	REGISTRATION REQUIRED	ADDITIONAL DECLARATIONS

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

		GR	GM	PR	TR	ER	
Capsicum✞	Dimethoate (spray only) 400ppm and fruit must be sprayed for a minimum of one minute	□	□	□	□	□	- "The capsicums in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF".
Citrus	Area freedom	QLD	QLD	□		□	- "The citrus in this consignment has been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa*"
Citrus	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	QLD	QLD	□	□	□	- "The citrus in this consignment has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa*"
Cucumber	Area freedom			□		□	- "The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk group 2 regulated pests specified by NZ MAF"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Cucumber✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	□	□	□	□	□	- "The cucumbers in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Cucumber✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Grape	Area freedom	□	□	□	□	□	- "The grapes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The grapes in this consignment have undergone appropriate pest control activities that are effective against *Latrodectus hasselti and Conogethes punctiferalis*" - "The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Grape	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	□	□	□	□	□	- "The grapes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The grapes in this consignment have undergone appropriate pest control activities that are effective against *Latrodectus hasselti and Conogethes punctiferalis*" - "The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*"
Honeydew	Area freedom			□		□	- "The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Honeydew✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	□	□	□	□	□	- "The honeydew melons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF"
Honeydew✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The honeydew melons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Mango	**Export prohibited**						
Papaya	**Export prohibited**						
Pears	Area freedom			□		□	- "The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Pears	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days				□	□	- "The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Pineapple (smooth cayenne only)	Non-host status			□		□	- "The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Pumpkin	Area freedom			□		□	- "The pumpkins in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pumpkins in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Rockmelon	Area freedom			□		□	- "The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF"
Rockmelon	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute				□	□	- "The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Rockmelon✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The rockmelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Scallopini	Area freedom			□		□	- "The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Scallopini✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	☐	☐	☐	☐	☐	- "The scallopinis in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Strawberry	Area freedom			☐		☐	- "The strawberries in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry"
Strawberry	Methyl bromide 48g/m^3 for 3 hours at a temperature of at least 15°C				☐	☐	- "The strawberries in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry"
Tomato	Area freedom			☐		☐	- "The tomatoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Tomato✞	Dimethoate (spray or dip) 400ppm and fruit must remain wet for a minimum of one minute	☐	☐	☐	☐	☐	- "The tomatoes in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - "This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia"
Watermelon	Area freedom			☐		☐	- "The watermelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Watermelon✞	Methyl bromide 32g/m^3 for 4 hours at a temperature of 21°C to 26°C	☐	☐	☐	☐	☐	- "The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Watermelon✞ (1 May – 30 Sep)	Winter Window	☐	☐	☐		☐	- "The watermelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Zucchini	Area freedom			□		□	- "The zucchinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Zucchini	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute				□	□	- "The zucchinis in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required

PR packinghouse registration required
TR treatment registration required
ER exporter registration required

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SECTION 4. MANAGEMENT RESPONSIBILITIES

This section lists and describes the responsibilities associated with any BQA/IHS export pathway to be performed by all those organisations, groups and individuals to ensure that the BQA/IHS is developed, maintained and audited to standards that ensure confidence in the systems being implemented and accuracy in the phytosanitary certification which must be provided for export of fruit fly host products to New Zealand.

4.1 AQIS Canberra Office

The AQIS organisation structure and management flow chart is at Attachment 1 at the end of this Section. It is recommended that each AQIS Regional Office and/or State Department develop its own organisation structure and management flow chart as it will apply to the management and auditing of the Australian - New Zealand BQA/HIS, and include this information for distribution within that State.

Manager - Plant Programs Section - Animal and Plant Programs Branch

- will be responsible for ensuring;

    - all components of the BQA/IHS Systems Operations Manual are being complied with consistently, over all commodities and treatments through all States.
    - by delegation within Plant Programs Section, for all establishments/premises that are required to be registered, that regular audits of State Departments (where applicable) and AQIS Region/State Office systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the BQA/IHS and that a proper record management system is available and easily accessible.
    - that AQIS Region/State Offices are conducting audits of Certification Assurance (CA) establishments in accordance with the requirements of QMP - SM - 01 and the requirements of the BQA/IHS and this Manual.
    - wherever deficiencies are found in the systems (either at or within the States' responsibilities) that any adverse findings are recorded and corrected at the earliest opportunity and are subsequently re-audited to verify that corrective action requests have been satisfactorily implemented.
    - collate and circulate up to date National lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.
    - that all amendments to this Manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.
    - that audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

4.2 State Departments of Agriculture (or equivalents)

Where AQIS is not directly represented at State level (Tasmania, Western Australia and Northern Territory), State Departments of Agriculture or their equivalents are responsible for the following;

- the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,
- ensure all exporters, treatment centres, packinghouses and growers (where applicable) are meeting the requirements of the BQA/IHS and the directions contained in this Manual,

- ensuring inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities from that State that are being exported to New Zealand,
- ensuring they have registered all required components of the export pathways for commodities being exported through that State and have a Register of registered growers, packers, treatment centres and exporters for the BQA/IHS commodities which have been forwarded to AQIS Canberra Office, and that there are systems in place to forward amendments to the Register on a frequent basis (monthly),
- ensuring that audits (including internal audits) are being conducted at the correct frequency so that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,
- ensuring that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed.
- where required, ensure that the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual State management plans (as submitted to MAF New Zealand), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of New Zealand NASS Standards 158.03.06 and 158.03.07 and
    - will report to AQIS Canberra Office any detections of economically significant fruit fly species found within trapping grids within 24 hours of identification.

4.3 AQIS State Offices

AQIS State Offices, through the Regional Managers and Program Managers (Exports), located in Queensland, New South Wales, Victoria and South Australia are responsible for the following;

- the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,
- ensuring all exporters, treatment centres, packinghouses and growers (where applicable), are meeting the requirements of the BQA/IHS and the directions contained in this Manual,
- ensuring inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities that are being exported to New Zealand from that State,
- ensuring they have registered all required components of the export pathways for commodities being exported through that State,
- ensuring that audits (including internal audits), are being conducted at the correct frequency and that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,
- ensuring that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed,
- ensuring all inspectors in their State, involved in the New Zealand BQA/IHS export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported to them by Canberra Office, in any district of Australia,
- ensuring Canberra Office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

4.3.1 Registration Requirements

AQIS Offices and State Department agencies will implement a registration system for all growers (where applicable), packinghouses (where applicable), treatment centres and exporters who intend to produce, pack, treat and export fruits and vegetables as listed in this Manual for export to New Zealand.

AQIS prefers that growers should register for the New Zealand programs with their packinghouse or exporter however AQIS will accept grower applications for registration at local offices, State Departments of Agriculture or their equivalent. Whichever authority accepts the registration of growers/properties, they will be responsible to ensure that registration details are forwarded to both the AQIS State Office and the AQIS Canberra Office. The accepting authority will also be responsible for ensuring grower spray and monitoring diaries are current and relevant.

Growers of commodities who require registration will not be permitted to participate in the New Zealand trade for that commodity, unless AQIS has details of the properties or blocks for registration, of that grower.

All organisations that are undertaking approved disinfestation treatments must be registered, packinghouses where required for specific commodities must be registered and all exporters of fruit fly host commodities (including non-host commodities) must be registered for each commodity.

It is the responsibility of each individual State/region to develop a system of recording Registrations, and that such records are maintained so they are auditable.

Registration details will include name, address, unique number identifier, purpose of registration (grower, packer, treatment centre etc.), and current status e.g. active/non active.

AQIS State Offices and State Department Agencies must forward a list of registrations made in that State to Canberra Office for an Australian consolidated list. A list of current registrations should be forwarded prior to the commencement of each commodity season and must be updated/amended as new applications are processed during a season. Canberra Office will make this list available to all State Offices/Agencies through the LAN computer network or hard copy documents.

NOTE: this information is extremely important, particularly when exporters are sourcing fruits from interstate but assembling export consignments in their home State prior to export to New Zealand.

4.3.2. Sampling Requirements

For the purpose of the treatments detailed in sections 3.3, 3.4 and 3.5 of this manual, the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

4.3.2.1 Consignment Line Samples

Following individual grower line inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines can only consist of fruit/vegetables from a common treatment pathway. For example, under appendix 4 to the BQA zucchinis and rockmelons can be combined as a consignment—scallopinis cannot be combined with these commodities as they are associated with a different pathway (ie, in-field controls as well as dimethoate).

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. There can be no rules of how this requirement is applied, however, the following guidelines may assist in determining selection of sample cartons;

- select one or more samples from the grower submitting the largest lot within the consignment,
- select one or more samples from the commodity comprising the greatest quantity in the consignment line,
- select at least one carton from the commodity seen to present the greatest quarantine risk,
- select at least one carton from any known "poorer" performing growers/packers or from a newly registered grower or packer.

Consignment lines that are passed after AQIS inspection will be identified as "passed for New Zealand" and immediately separated from any other produce which has not been passed or is not destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.2.2 Grower Line Samples

A grower line is a number of packages of one commodity from one grower with one common treatment, presented for inspection at one time. This includes a grower line that is presented for inspection that will subsequently be split into separate consignments for export.

Grower lines that are passed after AQIS inspection, will be identified as "passed for New Zealand" and immediately separated and segregated from any other produce which has not been passed or is not destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.3 AQIS Inspection Procedures

AQIS will carry out inspections as required under the New Zealand BQA/IHS only where establishments provide an area which is suitable for the purpose and contains:

- a suitable bench or table on which to work,
- suitable fixed lighting of a minimum of 600 lux,
- a clean and relatively noise free area in which to perform inspection functions,
- all relevant BQA/IHS documentation covering the line to be inspected is available prior to the inspection commencing.

Inspections performed by AQIS for the BQA/IHS programs will be recorded on "Inspection Record - New Zealand", attached at Appendix 3.4.

NOTE: alternative types of Inspection records can be developed and used as long as they contain at least as much information supplied on the inspection record sheet as detailed in Appendix 3.4

AQIS inspection may be by grower line or by consignment line at the option of the exporter (but either the exporter or exporter delegate must have undertaken grower line inspections and provide detailed records of such inspections), and will be in accordance with the sampling plan detailed in Table 1 and at the same sample regime as used by the exporter/exporter delegate.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

NOTE: not withstanding the requirements of this Manual, should AQIS consignment inspection result in a rejection for quarantine purposes, the whole consignment is rejected not just that particular grower line. If the exporter requires the balance of the consignment for export purposes, the exporter/exporter delegate must re-inspect the balance of the consignment (as it is a new lot), by grower line before AQIS will re-inspect.

Exporters will provide AQIS officers with inspection records of the grower line inspection details before AQIS will commence their inspection. If all records are not provided or any records are incomplete, the consignment will not be inspected until these records are completed and sighted. AQIS will **not** accept outdated inspection forms.

NOTE: AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest. This must be undertaken until industry can provide clear scientific evidence that the mealybugs *Ferrisia virgata, Maconellicoccus hirsutus, Nipaecoccus viridis and Planococcus pacificus* are not associated with this export pathway.

4.3.4 Rejection Procedures

A rejection upon inspection by AQIS of either a consignment or grower lot does not necessarily indicate that a packinghouse or grower has breached the conditions of the Arrangement. It should however indicate a possible problem within the packer/exporter system and therefore it will be recorded.

All rejections are to be recorded on Form Ex 161 (Inspection Advice Note) and must detail the grower, packer and exporter/delegate through which the commodity has passed.

Exporters/exporter delegates who fail two inspections in any one season must be audited immediately. This will ascertain if there are reasons that AQIS may consider necessary for suspending the nominated inspector/quality controller from the New Zealand programme, or if corrective actions can be implemented quickly and there is a possible need for a follow up audit within 7 days.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for Quarantine Risk Group 3 Pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of "Area Freedom from Fruit Flies", all area freedom districts in that State are suspended. Audit/s must be undertaken at the earliest opportunity.
- Any rejection for Quarantine Risk Group 2 Pests - Senior Inspector/Supervisor to be informed immediately to consider if audit of grower, packer, exporter or exporter delegate is necessary. This may depend on type and quantity of infestation detected.
- Any rejection for Quarantine Risk Group 1 Pests - The consignment can be totally withdrawn from the New Zealand export market, or corrective action can be undertaken. Corrective action can be performed by either treating the product (fumigation etc.) or by the exporter withdrawing the offending part of the consignment and undertaking reinspection before re-presenting the remaining part of the consignment for further AQIS inspection.

4.3.5 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand. This procedure will allow one inspection at the fee for service rate.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed including any that may have not been forwarded to New Zealand (That is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: the "split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has given approval that the necessary documentation and record keeping to be used for these procedures is both satisfactory and auditable.

Split consignments, where exporters/importers want to reduce the MAF on arrival inspection, must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

- notification of consignment details to MAF as they occur,
- the New Zealand communication links (importer and MAF contacts),
- flow chart detailing how the phytosanitary certificate moves through the system.

Each such procedure must have AQIS and MAF approval before implementation.

4.4 Untreated Produce Being Forwarded from Country Areas

Growers of commodities which require in-field controls, Certification Assurance (CA) establishments and, who will be forwarding untreated produce from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate) signed by an authorised AQIS officer, or a signed copy of an EX 28 Notice of Intention to Export, or, a grower declaration form attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide either the transfer certificate, Notice of Intention to Export or grower

declaration to AQIS, prior to any AQIS inspection being undertaken.

4.5 AQIS Auditing Requirements

Auditing is necessary to ensure that all parties are meeting their obligations as set out in this manual. It is therefore essential that during an AQIS audit of growers, packinghouses, treatment centres, exporters and exporter delegates, the auditor confirms that the auditee is using the current version of this manual.

4.5.1 AQIS BQA/IHS Audit Requirements

AQIS inspection staff are to conduct audits of growers (where applicable) to ensure compliance with registration requirements. Such audits are to include an assessment of growing practices, field hygiene, pest monitoring, spray diary entries and SBV status (avocado growers only). AQIS however, may not audit all individual growers who are supplying fruit to:

- *CA accredited packinghouses,
- Packinghouses who pack commodities which do not require grower registration,
- *Growers who are using the services of a registered crop monitor.

* However, some growers under these regimes must be audited as part of the audit of the packinghouse establishments as documented in Grower/Audit frequency, Section 4.8.1 of this Manual.

4.5.1.1 Grower/Audit Frequency:

Grower registration is required for some of those commodities for which Risk Group 2 pests are listed, and for those commodity/treatment pathways which must make reference to Appendix 10 to the BQA. Registered growers must undertake all the required monitoring and field controls, and keep records of all management surveillance and corrective actions.

AQIS will audit growers of these commodities to ensure compliance with the directions given in this manual, and therefore, phytosanitary certification is undertaken in accordance with New Zealand's requirements.

The accepting authority for grower registrations will ensure audits are conducted and ensure property records are maintained in accordance with the directions in this Manual.

Upon application to be a registered grower, the accepting authority will conduct an “initial” audit of the grower's property and record keeping, to satisfy themselves that the grower can meet the requirements of this Manual for that commodity. Following an initial audit, growers will have at least one other "additional audit" during the subsequent growing season.

NOTE: the AQIS audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure that the requirements of the new treatment are being met, and to identify any problems or potential problems with implementing the treatment.

For growers previously registered and having successfully participated in the New Zealand program the previous season/year, one audit will be formally conducted early in the new picking/packing season. (That is, no initial audit is required in subsequent years/seasons providing registration and supply to New Zealand has been continuous).

Should deficiencies be found at anytime during the registration period, follow up audits will be required to ensure corrective actions have been completed which will allow registration to be

continued. Should a grower not manage the registered property in accordance with the directions of this Manual, and make no corrective action where deficiencies are detected, the property must be placed under suspension from the New Zealand program.

Where an Agency other than AQIS has placed a property under suspension from New Zealand trade, that Agency must inform their AQIS State Office of the suspension at the earliest opportunity. The AQIS State office will advise inspection staff in the area of property suspension and advise AQIS Canberra Office as soon as possible after obtaining such a report.

All audits of growers (AQIS or State Department staff), will be "announced audits" giving the grower at least two days notice. All AQIS audits are chargeable with the times involved being debited to the exporter or packinghouse with whom the grower will be supplying product.

Unannounced monitoring audits can be conducted if in the opinion of the Senior Inspector (Exports) a need is demonstrated. Unannounced monitoring audits are not chargeable unless a major non-conformance is detected.

4.5.1.2 Grower Audits - Certification Assurance Systems

Where a packinghouse has an approved Certification Assurance Arrangement with AQIS, and is involved in a commodity for which the grower must be registered, the packinghouse must register and audit those growers to ensure that the stipulated field management controls are being effected.

During normal AQIS auditing of an establishments' CA Arrangement, a sample of registered growers will be audited as part of the overall quality system for compliance with the requirements of the BQA/IHS and the directions given in this Manual. If a major non-conformance is detected at such grower audits, the suspension of the packinghouse may be considered necessary as it is the packinghouse that is responsible for ensuring compliance with AQIS/New Zealand requirements.

4.5.1.3 Audit Requirements/Growers - Suspension Criteria

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

- no pest control or monitoring records,
- bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,
- bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.
- evidence of growers not committed to carrying out the requirements as set out in this Manual, no corrective action to control quarantine weeds/seeds or pests and diseases,

4.5.1.4 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow-up audit, should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

- inadequate monitoring/spray records,
- insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),
- evidence of quarantine weeds within the property (but not yet seeding),

- adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days or a week or so, is dependent on the type of problem and the relationship to growing/harvesting of the current crop. Senior Inspector (Exports) will have to determine whether follow up audits will be required or not.

4.6 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent) to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or their equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for, and, such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where, through AQIS packinghouse grower audits, it is found that at least three growers are covered by the same crop monitor, and grower audit reveals substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived by the Senior Inspector (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

4.6.1 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

- failure to maintain individual grower records,
- inadequate or incorrect records,
- failure to provide growers with a record of each visit including any recommended pest control measures,
- recommendations to growers to apply non-recommended or unregistered chemicals.

4.7 Audit Requirements/Packinghouses

All packinghouses packing BQA/IHS produce will be audited annually (minimum) for compliance with grower numbers/addresses registers, training of staff within the establishment, completion and storage of records and security responsibilities. Variance to audit requirements can be made at the discretion of the Senior Inspector (Exports).

Packinghouses involved in those commodities with Risk Group 2 pests, for which grower registration is required, will be subject to AQIS audit on initial application/registration under the New Zealand requirements, and then at least on one further occasion during the actual packing season.

Packinghouses which are involved in physical or chemical disinfestation treatments for the New Zealand BQA/IHS will be subject to auditing requirements against the directions contained in Section 3 - Approved Treatments, of this Manual.

A packinghouse that has been delegated and accepted exporter inspection duties as required by this Manual will be audited to ensure that all such inspections have been conducted in accordance with the directions of this Manual, and that proper records have been maintained and filed.

Where packinghouses are required to be registered under two or more of the above criteria, audits of each element requiring registration will be conducted in one audit.

If a packinghouse audit detects minor non-conformities against the requirements and directions of this Manual, the packinghouse will be required to address the concerns, and a follow up audit will be scheduled within 7 days. If a packinghouse audit detects major non-conformance in any element, consideration will be made as to whether the packinghouse should be suspended until the required corrective action has been implemented and successfully re-audited. The Senior Inspector (Exports) will have the authority to assess and implement the necessary actions, depending on the circumstances surrounding a non-conformance against the systems.

The basis of all packinghouse audits is to ensure it is performing its responsibilities for those commodities/treatments/inspections under the BQA/IHS arrangements and the directions of this Manual.

CA accredited packinghouses will be audited for compliance with the New Zealand BQA requirements under their existing audit programmes.

All audit time involved at the packinghouses is to be charged to the packinghouse involved.

4.7.1 Packinghouse Audits/Non Compliance

AQIS may deregister a packinghouse for the New Zealand BQA/IHS if:

- the packinghouse was sourcing fruit/vegetables from unregistered growers where it is a requirement of this Manual for them to be registered.
- the packinghouse did not have procedures in place for identifying commodity specific registered grower/s,
- the packinghouse did not mark packages with a registered grower and packinghouse number,
- the packinghouse did not have procedures in place to segregate commodity specific growing lines through the packing process, (including area freedom treatment commodities),
- the packinghouse did not have trained staff operating at the time of packing BQA/IHS produce that could recognise pests, disease and weed seeds that are of concern to New Zealand,
- the packinghouse did not have procedures in place to deal with suspect fruit with a sting, rot or bruise,
- the packinghouse did not comply with "inspection procedures" as delegated and accepted by them through their exporter,
- the packinghouse did not comply with any other requirement set out in the BQA/IHS and the directions contained in this Manual.

4.8 Audit Requirements - Treatment Centres

Each treatment centre (either fumigation, chemical dip/spray treatment or cold) is responsible for clear, precise, documented and auditable procedures that detail how product relating to the BQA/IHS process is handled. Such procedures will include:

1. How product is identified
2. How product is treated and marked as treated.
3. The treatment process and controls.
4. How treatment records are documented
5. How measuring equipment is calibrated and how often and by whom.
6. Security of product after treatment.
7. Segregation of treated product from untreated product.
8. Supervision of loading.

Each treatment centre establishment (excepting fumigation facilities which are subject to direct supervision of each treatment performed) will be audited by AQIS at least once a month unless a premise has a CA arrangement with AQIS. Audit reports will be kept on file for a period of not less than 2 years.

AQIS requires that all treatment centres (other than fumigation centres) be monitored on a monthly basis during their operating season, and that audit reports are to be kept detailing when auditing/monitoring checks were performed. These audits/monitoring checks can be undertaken as part of inspection duties where inspections are performed at such centres but reports must be written and placed on file when they are actually undertaken.

Note: the Senior Inspector (Exports) has the authority to vary the above audit requirements on the basis of compliance with the operating instructions of this Manual. That is, in the case of continued substantial compliance, audit intensity may be reduced; in the case of marginal compliance or repeated non-conformance, intensity may need to be increased.

Inspectors must ensure that:

- treatment facilities are maintained in a condition that will provide efficacy in treatment programs,
- all measurement gauges are calibrated regularly, and records are maintained to verify this,
- all movement of treated produce is documented, particularly in relation to load-out activity,
- product security is maintained at all times.

4.8.1 Treatment Centre Audits/Non Compliance

If monitoring/audit checks being carried out on treatment centre premises reveal non-conformances, an official audit must be scheduled as soon as possible so as to instigate corrective action. Findings that may lead to suspension as a registered treatment centre or increased audit scheduling under the BQA/IHS will include :

- insufficient/improper identification of treated and untreated product,
- incorrect treatments,
- improper documentation,
- no calibration or records of calibration regarding measuring equipment,
- no segregation of untreated product and treated BQA product,
- product not correctly marked as treated or secured after treatment.

All audit time is to be charged to the treatment centre involved.

4.9 Audit Requirements - Exporters

AQIS will perform an audit of all exporters registered for the New Zealand programme on an annual basis. All relevant documentation for all New Zealand BQA/IHS consignments must be made available to the AQIS authorised officer. Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter/exporter delegate inspections, export documentation including EX 186 - Transfer of Product (or equivalent documents), EX28's - Notice of Intention to Export and Phytosanitary Certificates.

4.9.1 Exporter Delegate Audits

In addition to any scheduled packinghouse audit where packinghouse personnel are also approved to act as an exporter delegate for the purpose of inspection, treatment and/or load out security, two audits per year will be conducted on the exporter delegates responsibilities and their records. Audits will include inspection documentation, knowledge of Risk Group 1, 2 and 3 pests, demonstration of inspection techniques, sample selection and knowledge of the inspection requirements of this Manual.

4.9.2 Exporter/Exporter Delegate - Non Compliance

An Exporter/Exporter Delegate may be suspended from the BQA/IHS if they are not

meeting their obligations as detailed in this Manual. Major non-compliance may include:

- failing to provide up to date and correct documentation, including Inspection Records, for New Zealand BQA/IHS product,
- failing to correctly sample and inspect product,
- failing to appropriately train (or be trained) Quality Control inspectors for the purposes of inspecting BQA/IHS product,
- failing to segregate BQA/IHS treated/passed product from non treated product,
- failing to fulfil any other requirement/responsibility as outlined in this Manual.

Additional audits (scheduled by the Senior Inspector (Exports)), will be scheduled where an audit reveals minor non-conformities occurring within the exporter/exporter delegate responsibilities. The exporter/exporter delegate audit costs will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made and agreed to by AQIS.

4.9.3 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

- exporter/delegate inspection records,
- grower pest monitoring records and pest control diaries (commodity specific),
- packer training and associated pest identification,
- premises general hygiene,
- cleanliness of machinery and equipment,
- segregation and identification of produce/products,
- staff responsibilities,
- exporter or exporter delegate performing inspections are competent in carrying out their duties and know correct identification of pests/weed seeds.

Should auditing prove satisfactory and fails to identify any breach of the BQA/IHS arrangement or responsibility under the programme, all parties will be immediately re-instated.

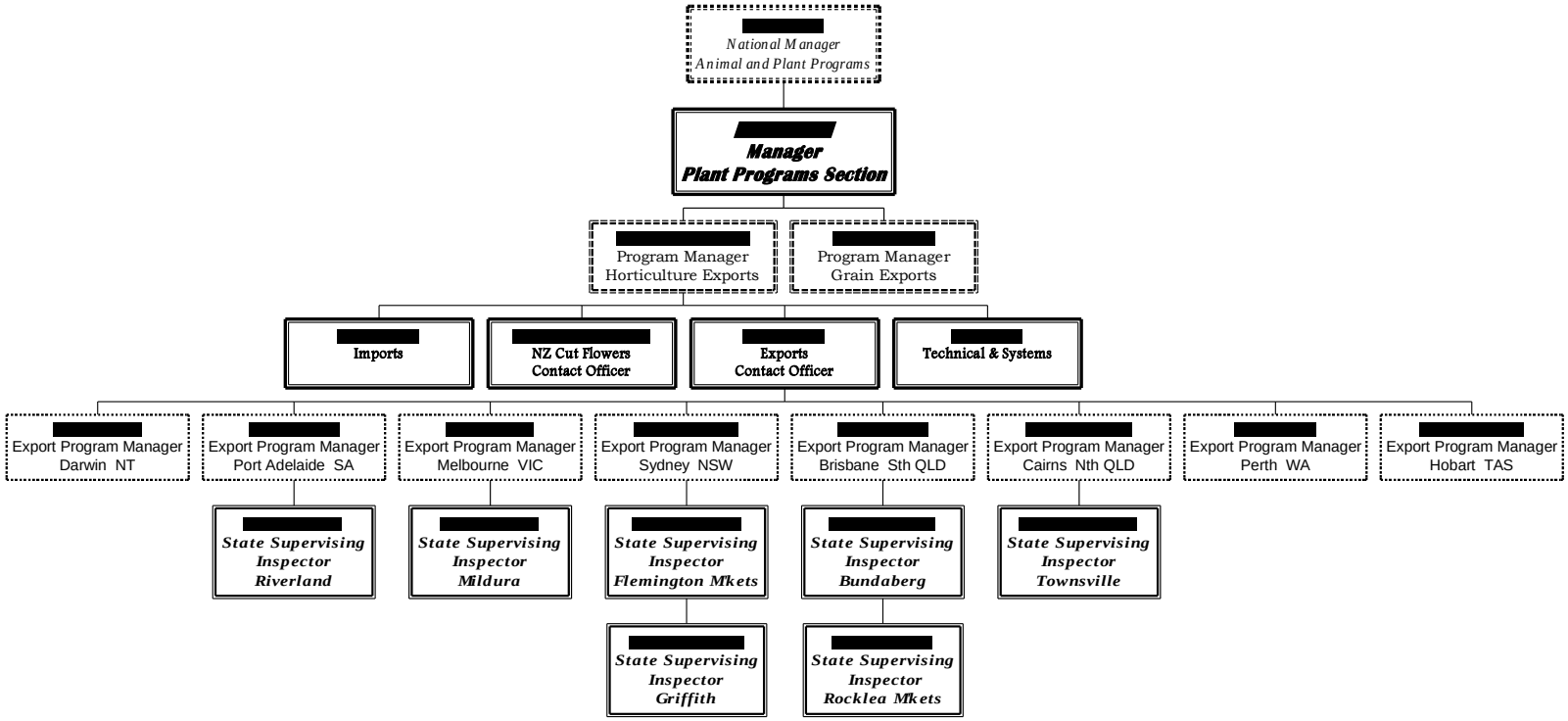
Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the State Senior Inspector (Exports) who will co-ordinate necessary action and advise all parties. Copies of any audit will be given to the relevant components of the pathway audited and kept on file in the State AQIS or Department office.

Inspectors undertaking these audits must be either AQIS AQA, AQIS CA or ISO/CA trained and accredited.

Attachment 1 to Section 4 – AQIS Plant Contact List

AQIS Plant Contact List



SECTION 5. GROWER RESPONSIBILITIES

5.1 Registration

Growers of commodities (excepting southern state citrus growers) for which in-field controls are required must be registered with AQIS for the purpose of exporting those commodities to New Zealand. These commodities include grapes,capsicums, tomatoes, avocadoes, citrus, cucumbers, honeydew melons, scallopinis and watermelons. Grower registration for the above cucurbits will include each block/property used to grow the cucurbits. A cucurbit grower declaration form (Appendix 3.15 to this manual) must be completed for each consignment of these cucurbits to be treated under appendices 3, 4 and 11 to the BQA.

NOTE: for tomatoes, only those growers exporting tomatoes to New Zealand under appendix 4 (dimethoate dip/spray treatment) to the BQA must be registered. This is because only approved tomato varieties can be grown for export to New Zealand under this appendix. Tomato growers must include in their registration application a map showing all blocks in which permitted tomato varieties are grown. Reference to individual blocks on this map will be made on the tomato variety declaration at appendix 3.10 of this manual.

Growers who must be registered for specific commodities will do so either by making application directly to AQIS or through their packinghouse or exporter. Packinghouses and exporters must forward any grower applications through to AQIS/State Offices for inclusion on the Master List (compiled by AQIS Canberra Office) of growers, approved for the New Zealand trade in that/those commodities that require grower registration.

Packinghouses/exporters who accept application for registration from growers will be responsible for maintaining all information which those growers will need to have in place to ensure compliance with the directions contained in this Manual and for auditing those growers in accordance with the directions contained in this Manual.

5.2 Responsibilities

Growers of those commodities detailed in 5.1 above must maintain spray monitoring diaries and implement field hygiene requirements that demonstrate an appropriate level of management and recording for those pests/contaminants listed as being Quarantine Risk Group 2 and 3 in the Pest Lists (as contained at Appendix 2 of this Manual).

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer)—however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the Southern states of New South Wales, Victoria and South Australia are not required to be specifically registered for this program, monitoring and spray diaries must be kept because of the Risk Group 2 pest *Phyllocnistis citrella*.

Growers must register each block or property/ies that they will be using to grow those commodities for which they need to be registered.

Growers of produce that is to be exported to New Zealand, for which in-field controls are required against Risk Group 3 fruit flies, must manage registered blocks/properties in accordance with the Queensland Department of Primary Industries Farm note "Cucurbits – recommended pest control programme for export to New Zealand".

Growers are permitted to use the services of AQIS approved crop monitors for the New Zealand BQA/IHS arrangements. Should growers use the services of an AQIS approved crop monitor, the grower must still maintain spray diaries showing implementation of any corrective actions undertaken on the New Zealand registered property/block/commodity.

Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered New Zealand grower that they are undertaking services for.

5.3 Grower Audits

The registering authority (State Department, AQIS, packinghouse or exporter), will undertake grower audits at the following frequency;

. in the initial year of registration,

- before the grower is approved as a New Zealand grower (before harvesting commences) and
- one further audit during the growing season.

. where grower registration is continuous, in subsequent years,

- once during the season.

AQIS audits of grower responsibilities will be conducted simultaneously with packinghouse/exporter audits. All audit time will be charged to either the packinghouse or the exporter.

Cucurbit growers that export produce to New Zealand under the "**winter window**" field control systems approach will be audited more frequently. AQIS will audit blocks/properties and monitoring diaries on a monthly basis.

NOTE: growers will not be charged for audits associated with the New Zealand BQA. All audit charges are to be invoiced to the packinghouse or exporter who is packing/accepting the registered growers' fruits/vegetables, unless another satisfactory arrangement is made between AQIS and the parties involved.

5.3.1 Grower Suspensions

Growers will be suspended from the New Zealand trade if spray and monitoring diaries are not accurately maintained throughout the year or growing season.

All registered growers (excluding southern state citrus) must maintain monitoring and spray diaries of their registered blocks. All activities shall be recorded even where pests are noticed but are of small infestation levels which are deemed inappropriate to control with chemical sprays.

The following considerations may be applied to growers during grower audits;

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

. no pest control or monitoring records,

. bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,

. bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.

. evidence of growers not committed to carrying out the requirements as set out in this Manual,

. no corrective action to control quarantine weeds/seeds or pests and diseases,

5.3.2 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow up audit should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

. inadequate monitoring/spray records,

. insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),

. evidence of quarantine weeds within the property (but not yet seeding). This is of particular relevance to the crops, table grapes and capsicums which are subject to this type of infestation,

. adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days, or a week or so, is dependent on the type of problem and the relationship to growing/harvesting of the current crop. Senior Inspector (Exports) will have to determine whether follow up audits will be required or not.

5.3.3 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced, however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent), to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or their equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for. Such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where, through AQIS packinghouse grower audits it is found that at least three growers are covered by the same crop monitor, and grower audits reveal substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived by the Senior Inspector (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

5.3.4 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

. failure to maintain individual grower records,

. inadequate or incorrect records,

. failure to provide growers with a record of each visit including any recommended pest control measures,

. recommendations to growers to apply non-recommended or unregistered chemicals.

SECTION 6. PACKINGHOUSE RESPONSIBILITIES

Packinghouses that are packing fruits/vegetables for which in-field controls are required must be registered with AQIS for the purpose of exporting those commodities to New Zealand. These commodities include grapes, avocadoes, citrus, capsicums, tomatoes, cucumbers, honeydew melons, scallopinis and watermelons. Packers of rockmelons must also be registered if these commodities are exported to New Zealand under appendix 11 (winter window treatment) to the BQA. Packinghouses that have been delegated, and have accepted, exporter delegate responsibilities must also be registered for this purpose.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal packinghouse registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

Therefore, all packinghouses which are packing fruits/vegetables under the "Area Freedom" treatment (Appendix 2 to the BQA) must be registered for this purpose.

Packinghouses will however, maintain secure conditions for the packing of growers' fruits and will have systems in place to ensure grower identification and segregation of New Zealand fruits is maintained. That is, cross contamination with other commodities or the same commodity for markets other than New Zealand must be minimised.

All cartons of fruits/vegetables for the New Zealand export trade must be marked in some form with a grower and packinghouse identification. It is the exporter's responsibility to ensure that the exporter name and address is on all packages.

Packinghouses must have records identifying produce from each grower that is received, packing details and despatch details for each batch/lot of fruit that is to be certified for New Zealand.

6.1 Grower Registration - Commodity Specific

All packinghouses must provide a list of grower's names and addresses and designated numbers/codes for all suppliers of New Zealand BQA/IHS produce into that packinghouse.

As per Section 3 of this Manual, growers of some commodities will be required to be registered for the purpose of field management controls for pests which are determined to be Quarantine Risk Group 2 and 3 pests, or if they are growing commodities for export using the "**winter window**" field control systems approach. Commodity specific pests lists can be found at Appendix 1 to this Manual.

Where a packinghouse is packing fruits/vegetables for which in-field controls are required, all such fruits must only be sourced from registered growers of that commodity.

Growers of citrus fruits, whilst having the Risk Group 2 pest - Citrus leaf miner, will not need to be registered, although they must maintain spray and monitoring diaries for control of this pest.

Growers have the opportunity to make application for registration with AQIS, State Departments of Agriculture (or their equivalents), packinghouses or exporters. Where a grower makes application for registration with a packinghouse, the packinghouse is responsible to ensure:

. that the AQIS State Regional Office is aware of the registration/acceptance, and

- that all grower requirements as detailed at Section 5 of this Manual have/are being complied with, and
- the packinghouse will maintain records detailing audits of the grower property/block registered for the New Zealand BQA/IHS trade.

Packinghouses must have systems in place to ensure incoming produce is identified by grower and for commodities which have Quarantine Risk Group 2 pests that these commodities are segregated from any other fruits to minimise cross contamination of this produce.

6.2 Packinghouse Responsibilities - Commodity Specific

Packinghouses which are packing fruits/vegetables for New Zealand do not need to be specifically registered for the New Zealand export trade unless they are packing commodities requiring in-field controls, packing tomato varieties for export under section 3.4 of this Manual, or have been delegated and accepted duties/responsibilities by exporters.

Packinghouses that are effecting treatments as defined in the BQA or in this Manual must be registered for that purpose.

Therefore, all packinghouses which are packing fruits/vegetables under the "Area Freedom" treatment (Appendix 2 to the BQA), must be registered for this purpose. Similarly, all packinghouses packing commodities for export using the "**winter window**" field control systems approach must be registered to comply with the requirements of Appendix 10 and 11 to the BQA.

Packinghouses must ensure that the fruits/vegetables they are packing are free of all quarantine pests as contained in the pest listings at Appendix 1 of this Manual. This means all Risk Groups 1,2 and 3 and any Regulated non plant pests which are listed and are to be certified for on the phytosanitary certificate. Graders, sorters and packers must be trained to be able to recognise all pests and symptoms and to record findings of these pests.

Packinghouses packing BQA/IHS commodities for which they are required to be registered must perform a 600 unit inspection for each grower that makes up a consignment. This inspection does not replace an exporter or exporter delegate inspection for that commodity and must be undertaken regardless of exporter inspection requirements. Records of these inspections must be retained for audit purposes.

To help reduce the possibility of non-approved tomato varieties being inadvertently included in consignments destined for New Zealand, the approved tomato variety must be indicated (eg. stamped) on all export tomato cartons. To further help reduce this possibility, it is recommended that differentiation of export and domestic cartons be implemented. This already occurs in many instances, for example, different trading names/colours are used for domestic and export cartons.

6.3 Inspection Requirements

Where a packinghouse is registered for the New Zealand programme, that packinghouse must undertake grower line inspections for all consignments of New Zealand BQA/IHS produce. These inspections will be carried out using a 600 unit inspection sample for each grower making up the consignment. All inspection results will be recorded as per Inspection Record at Appendix 3.4 of this Manual.

The maximum time that can be run continuously for New Zealand is a 24 hour process. Therefore each daily run must be considered as one lot and all grower inspections must be undertaken on that day. A grower run cannot be continued over into a new day.

For packinghouses located in areas which are declared free of fruit fly, inspection staff must cut any fruits which are considered suspect (soft fruits, bruised or rot spots) and the results of the cutting must be recorded.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

6.3.1 Documentation

Where an exporter has delegated to the packinghouse the exporter inspection requirements, and where that packing establishment requires AQIS to undertake inspection at the establishment, the packinghouse will provide copies of the delegation request and confirmation as required under Section 9.6.

6.4 Security and Supervision Responsibilities

Where a packinghouse has been delegated and accepted exporter responsibilities in accordance with directions contained in Section 9.9 of this Manual the packinghouse must undertake and record all functions so delegated to them and which may include the following;

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and/or Export Permit (EX 28).

6.5 Packinghouse Audits

AQIS will audit all packinghouses involved in BQA/IHS listed commodities for compliance with grower names and addresses and allocated numbers/codes, and as appropriate, training of staff in

the identification of pests associated with the commodity/ies being packed. AQIS will also audit packinghouses to determine compliance with identification, segregation and security of product whilst on the premises. Records pertaining to all the foregoing aspects will be checked for accuracy.

The frequency of audits of packinghouses will be at the discretion of the Senior Inspector (Exports) in each state, but there will be a minimum of one audit per packing season and where seasons are longer than 4 months, it is recommended a second audit should be scheduled for that year.

6.5.1 Application for Registration

An initial audit will be performed prior to the commencement of the season for the purposes of ensuring that the packinghouse has systems in place that will meet the identification, segregation, inspection, security (and where applicable treatments) and recording requirements of the New Zealand BQA/IHS.

At least one additional audit will be undertaken during the packing season.

6.5.2 Continued Registration

At least one audit will be performed during the packing season.

Additional audits may be performed, where as a result of an earlier audit, non-conformances were detected and a reappraisal of the systems following corrective action may be considered necessary.

6.6 Suspension of Packinghouse Registration

AQIS may impose suspension of a packinghouse should the packinghouse be found to not be performing it's responsibilities in the required manner. Depending on the reasons for invoking suspension, such suspension may only affect trade for the New Zealand BQA/IHS and not other markets.

Packinghouses who do not have sufficiently trained staff, appropriate segregation and security and identification procedures, or detailed records of their New Zealand packing arrangements, may be subject to suspension.

SECTION 7. CERTIFICATION ASSURANCE ARRANGEMENTS - PACKINGHOUSE RESPONSIBILITIES

7.1 General Requirements

All fruits/vegetables for the New Zealand export trade must include grower numbers or equivalent codes and packinghouse numbers on each individual package. It is the exporter's responsibility to ensure that the exporter name and address is on all packages.

Packinghouses located in areas declared to be free of fruit flies must have a register of all growers names and addresses and allocated grower numbers for all suppliers of New Zealand BQA/IHS commodities.

Should packinghouses located in fruit fly area freedom districts become involved in area freedom suspension zones, those packinghouses must be able to provide grower registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals must then have procedures for identification, segregation and packing processes to ensure "area free" fruits cannot be contaminated whilst on the establishment and/or surrounds.

It is recommended that packing establishments have contingency plans within their quality manuals to address additional procedures that would be required in the event of fruit fly outbreaks in their district. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

Packinghouses who have Certification Assurance Arrangements with AQIS may incorporate the required New Zealand systems into their Quality Manuals and be audited simultaneously with normal auditing requirements.

Packinghouses which have accredited CA Arrangements in place and who are packing commodities which do not have any Quarantine Risk Group 2 or 3 pests, and are not undertaking official disinfestation treatments, will not need to add any additional systems to their Quality Manuals.

However, packinghouses with CA Arrangements that are packing commodities with Quarantine Risk Group 2 or 3 pests listed will need to ensure that the quality systems, procedures and management ensures, that grower registration, commodity segregation, identification and inspections are performed to meet the New Zealand certification requirements. It is likely that some CA Quality Assurance Manuals will need to either be amended or have attached an Appendix to meet the new export requirements for New Zealand BQA/IHS commodities.

Packinghouses which are seeking CA accreditation for the New Zealand BQA/IHS must have 5 joint inspections (packinghouse – AQIS) to assess the ability of packinghouse inspection staff to undertake inspections for New Zealand in accordance with the directions contained in this Manual and before CA accreditation can be given.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

7.1.1 Auditing for New Zealand Requirements

CA accredited packinghouses who incorporate BQA/IHS commodity responsibilities within their current Quality Manuals will be subject to normal audit regimes which will incorporate any specific New Zealand requirements.

CA accredited packinghouses who wish to leave specific New Zealand BQA/IHS requirements outside their other CA accreditation will have the two systems audited separately but within the usual audit schedules that apply to that establishment.

Packinghouses which have responsibility for registering growers and ensuring adequate field control monitoring and spray diaries are properly maintained for specific Quarantine Risk Group 2 pests, will have a percentage of those registered growers audited at the packinghouse schedule audits to ensure compliance with the New Zealand BQA/IHS is in effect.

Where required, packinghouses who elect to register growers of commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. on initial registration
. following registration at least once during the growing season and
. in subsequent seasons, once during each growing season.

During AQIS CA audits, auditors will perform random audits of growers who are required to be registered under the BQA/IHS on the following basis;

. in the initial year of registration - 5% of all growers registered by the packinghouse
. subject to compliance with all requirements the previous year - reduce to 2 1/2% of all growers registered by the packinghouse or
. if nonconformances were detected at a previous audit - increase random selection of growers to 10% of all registered growers of that packinghouse.

Should a major nonconformance with the New Zealand BQA/IHS and the instructions contained in this Manual be detected at audit, the packinghouse will be suspended from the New Zealand trade in fruit fly host material immediately, and depending on the type of nonconformance, suspension from the AQIS CA Arrangement may be considered. Such a decision will be given through the AQIS CA Contact Officer in that State in conjunction with State Regional Manager and Canberra Office.

7.1.2 CA - New Zealand Inspection Requirements

As most CA Arrangements are based on “in-line” process controls rather than “endpoint” inspection regimes, CA packinghouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted where the CA establishment has systems in place that;

. address grower field controls (horticulture extension officers, reference to crop monitors etc.), and
. have some form of formal receival inspection records, and
. within the processing line have sorter and grader recording systems..

In order to properly document the required inspection for the New Zealand BQA/IHS, CA packinghouses will undertake “in-line” consignment line inspections according to the following;

TABLE 7

DETERMINING SAMPLE REQUIREMENTS
ACCREDITED AQIS CA ESTABLISHMENTS
IN-LINE PROCESS CONTROL

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 7 sets out possible sampling regimes that can be applied as in-line process controls within an accredited CA packing establishment. The maximum time that can be run continuously for New Zealand is a 24 hour process. It is extremely important that records showing this type of in-line process control are maintained for each consignment run for the New Zealand protocol.

All inspections (undertaken as indicated in Table 7) must be undertaken by the Senior Quality Control Officer. Where inspections are performed as per Table 7, these are consignment line inspections and individual grower line inspections are not required.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

Packinghouses can make up any type of sampling system based on the above table but it is important to document exactly what regime is to be used before the production run is commenced and that the sampling regime is representative of the consignment/s being assembled.

The packinghouse requirements covered in Section 6 of this Manual pertaining to identification, segregation, security and records for all New Zealand destined produce must be part of the Quality Assurance Manuals submitted to AQIS for approval.

7.2 Documentation

The identity of the exporter, in addition to the grower and packinghouse numbers will be included on all packages covered by the BQA/IHS.

For all product that is being transferred intrastate or interstate, documentation will be required to ensure that the receiving company and AQIS inspector can verify the security and integrity of a consignment on arrival. A declaration to the following effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not been exceeded."
Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

7.3 Post treatment Security

Where a CA packinghouse has accepted an exporter delegation for the security and loading supervision of BQA/IHS commodities the packinghouse will nominate the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28).

SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES

8.1 Registration

In addition to normal AQIS registration requirements under the Export Control Act, all establishments who undertake either physical or chemical treatments for the disinfestation of fruit flies for export of host commodities to New Zealand, must be registered specifically for this purpose. Application for registration will be made directly to AQIS Regional Offices in the State where registration is required.

8.2 Process Controls

All treatment centres which are registered for the New Zealand BQA trade must have a system of process controls and record keeping which can be audited at all times.

Treatment centres must have systems which demonstrate identification, segregation, process controls, separation of treated and untreated fruits, quarantine secure areas or quarantine secure packaging following treatment and supervision responsibilities when loading produce either direct to export or through exporters/freight forwarders.

Persons who are responsible for calibrating, measuring and recording will be appropriately trained to be able to undertake these responsibilities and understand their importance.

8.3 BQA Treatments - AQIS Supervision

Treatment centres will be subject to the following AQIS supervision during treatments;

8.3.1 Fumigation Centres

Where fumigation is being performed with the use of flexible tents, AQIS inspection staff will attend each fumigation which is being undertaken for the New Zealand BQA. AQIS will attend the treatment centre either at commencement of the treatment to be carried out or prior to the completion of the fumigation. AQIS officers will verify treatment dosages, calculations and gas retention general process controls for each fumigation treatment.

Treatment centres which are using fixed capacity fumigations (chambers or fixed tents), will be audited at the first fumigation treatment being performed for the New Zealand trade and then if substantial compliance is being effected 2 - 3 times during the season.

Fumigation centres must advise their local AQIS office 24 hours in advance of intended fumigation treatments. If it is difficult for AQIS to be in attendance at the required times, arrangements will be made between the treatment centre and the local AQIS office which will enable the treatment to go ahead but define how AQIS will manage the required supervision requirements.

8.3.2 Cold Storage Centres

AQIS inspection staff will undertake supervision of each cold disinfestation treatment. In normal circumstances AQIS will be required to be in attendance when sensors and probes are calibrated, both prior to and at the completion of each treatment. Inspection staff will also attend the cold disinfestation treatment centre once during the disinfestation period (normally about halfway through), to ensure that temperature recording is being maintained in the required manner.

Where cold disinfestation treatments are being undertaken using manual recording devices, AQIS inspection staff will attend for monitoring purpose at that treatment centre every 3-4 days during the treatment/s being undertaken.

8.3.3 Dimethoate Treatments

8.3.3.1 Waxed produce

The application of waxes or oils to produce prior to dimethoate treatment is prohibited for export of produce to New Zealand. The application of waxes or oils to produce which has completed the disinfestation treatment and completely dried will be allowed only at the discretion of the State Senior Inspector (Exports).

8.3.3.2 AQIS requirements

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment, however, AQIS inspection staff will undertake analysis of chemical dipping strengths on the following basis;

. during the first year of a treatment centre registration,

  - each month

. where registration has been continuous and without a nonconformance,

  - twice during the treatment season.

In addition to the above AQIS analysis, treatment centres which perform dimethoate dipping/spraying are required to have a recognised agency analyse the concentration of dimethoate used in their dips/sprays. This will be undertaken monthly during the first 3 months of the treatment season, followed by an additional sample if the treatment season extends for a period of greater than 4 months. Results of these analyses will be retained and made available to AQIS authorised officers upon request.

8.4 AQIS Audits of Treatment Centres

AQIS will conduct audits of treatment centres on the following basis;

Fumigation Centres

One annual audit during the first 10 days of each season (to be conducted during a treatment) to verify that treatment centre operators are trained in their responsibilities and know what information is required to be recorded.

Cold Storage Centres

One annual audit during the first three treatments of each season to verify that all treatment centre responsibilities are being maintained.

Dimethoate Treatment Centres

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season. For treatment centres who have undertaken successful audits in the first year, two audits per year/season thereafter will be undertaken, as long as compliance with the New Zealand requirements is being maintained.

All Treatment Centres

Should non-conformances be detected during the audit schedules covered above, additional audits may be required to ensure corrective actions have been implemented.

Should major non-conformances be detected during audit, the treatment centre may be suspended from the New Zealand BQA/IHS trade until AQIS is satisfied that corrective action has been implemented and that systems are established to ensure that the nonconformance will not reocccur.

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SECTION 9. EXPORTER RESPONSIBILITIES

9.1 Registration Requirements

All exporters of BQA/IHS products to New Zealand must be registered with AQIS for this purpose. Exporter applications will be made to the AQIS State Office where the exporter's business is conducted.

Applications for registration will include details of the commodities and treatment pathways (where it is known) that the exporter intends to use to meet with the conditions stipulated for export of those commodities to New Zealand.

If details of treatment centres are not known at the time when an application for registration is made, AQIS will accept the application, but exports of the particular commodities will not be permitted until the exporter provides AQIS with the details of the treatment centres for those commodities covered in the application for registration.

9.2 Exporter Responsibilities

Whilst exporters can delegate some duties, the exporter will remain responsible for all activities which pertain to the inspection, security and loading of product following treatment.

Exporters must ensure at all times:

. either directly or by delegation, that product security during loading, transporting and export consignment consolidation is not compromised and that there can be no substitution or cross infestation of product following treatment,

. that exporters inspection requirements (either exporter or exporter delegate) as detailed in this Manual are performed by staff that are qualified to do so, and that records are kept for all inspections performed,

. that inspection records are given for each grower lot presented for AQIS inspection,

. that liaison with AQIS/State Officers takes place as necessary to advise of product movement and inspection requirements,

. all documentation, including phytosanitary certificate endorsements that are required for product to enter New Zealand, are maintained.

9.3 Exporter Inspection

Where grower line inspections are performed by the exporter, full details of the inspection performed will be recorded.

NOTE: all exporter inspections must be undertaken at an appropriate sampling rate, as given in Section 2 of this manual.

Exporters will ensure that all staff undertaking inspection duties are properly trained in pest and weed seed identification for the pests and weedseeds which are of a quarantine concern to New Zealand.

During exporter inspections, any soft, bruised or rot spot fruits will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, that all larvae are dead. The results of all fruits which are cut will be recorded on the inspection sheets.

A copy of the "Inspection Record" together with other documentation relating to the shipment will be held on file for 2 years and be subject to AQIS/MAF audit.

9.4 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections, exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any that may not have been forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

Each such procedure must have AQIS approval before implementation.

NOTE: the "split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has approved that the necessary documentation and record keeping is satisfactory and auditable.

For split consignments where exporters/importers want to reduce the MAF on arrival inspection, exporters must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

. notification of consignment details to MAF as they occur,

. the New Zealand communication links (importer and MAF contacts),

. flow chart detailing how the phytosanitary certificate moves through the system.

9.5 Untreated Produce being forwarded from Country Areas

Growers/Packinghouses who are forwarding untreated Risk Group 2 fruits from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate, signed by an authorised AQIS officer), or a signed copy of an EX 28 Notice of Intention to Export or, a grower declaration form, attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide Notice of Intention to Export (EX 28) and any other relevant documentation to AQIS, prior to any AQIS inspection being undertaken.

9.6 Delegation of Inspection

Where responsibility for the export inspection is delegated to another party, this will be done in writing with the delegate acknowledging in writing, their responsibilities in so accepting the delegation. Copies of documentation for delegation and acceptance of these duties will be held on both companies filing systems.

Where the exporter has delegated the exporter inspection requirements, the delegated inspection person will perform individual 600 unit (or equivalent) consignment line inspections regardless of any "in-line quality control" inspections that may have been undertaken and recorded.

NOTE: accredited AQIS CA establishments are not required to undertake end-point inspections where their quality systems give procedures for a 600 unit inspection to be completed in-line and where the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

Any person/s who are delegated the responsibility for undertaking exporter inspections must have the ability to identify those pests and weedseeds that are of a quarantine concern to New Zealand.

All inspections, whether by exporter staff or delegated persons, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10 where appropriate.

Inspection procedures must include cutting of damaged fruits as detailed at Section 9.3 of this Manual. Records of all fruits/vegetables cut will be recorded on the inspection sheets.

All inspections performed by an exporter or delegated persons will be recorded on an "Inspection Record" and held on file by that exporter/delegate. A copy of this record must be presented with the line/lot for AQIS inspection.

9.7 Documentation

The identity of the exporter, in addition to the grower and packinghouse numbers, will be included on all packages covered by the BQA/IHS.

A declaration to this effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not been exceeded."

It is important that all phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX 28 lot, and the phytosanitary certificate is given the EX 28 number, a different suffix must be added to the phytosanitary certificate number for each consignment subsequent to the first.

Where an export consignment is drawn from several EX 28 lots, the phytosanitary number used should be that of the EX 28 from which the greatest volume of product was sourced. A suffix will be added to that number if consignments have been exported from this lot previously. Only this number will be printed in the phytosanitary certificate number box.

If additional EX 28 numbers are required for traceability, these must be placed below the phytosanitary cetificate number box, in a manner that will ensure these numbers cannot be mistaken for the phytosanitary number.

9.8 Procedures for Exporter Rejected Produce

If live fruit fly is found during an exporter or exporter's delegate inspection of any grower lot, all produce from that grower lot (even if previously passed but not shipped) will be securely segregated from all other New Zealand BQA produce, and will be identified as not suitable for export to New Zealand.

The exporter or exporter's delegate is responsible for immediately notifying the AQIS officers in the region of the detection, the grower involved and details of the treatment centre who performed the disinfestation treatment (for treated produce only). The exporter or exporter's delegate must also advise the AQIS officers of what action they are taking to ensure there is no cross contamination of other BQA/IHS produce.

AQIS Senior Inspector (Exports) in that State will formally advise the treatment centre of the possible treatment failure and that the centre will be suspended pending an audit of the treatment. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the detection of live fruit fly, reinstatement of the treatment centre for the New Zealand trade may be permitted.

Should during exporter inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS officers in that region of the detection. The fruit must be immediately identified as failed for export to New Zealand and segregated from all other New Zealand destined fruits/vegetables.

AQIS inspection staff must notify the grower of this produce of the failure and the grower will be placed on suspension and subject to an audit of his property to learn the reason for failure. If the audit identifies nonconformances but which can be corrected immediately, consideration will be given to allow the grower to take those corrective actions and be reinstated for the New Zealand program.

9.9 Post treatment Security

An exporter will nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on their premises,
- supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,
- documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28) and is to be faxed through to the AQIS office in the originating area/location.

9.10 Security of Produce - Exporter/Freight Forwarder Premises

Treated produce, on arrival at an exporter's premise or Freight Forwarder Depot, will be inspected by AQIS officers to ensure that the security of the consignment is intact. Inspectors will ensure that the produce is in a secure/safe condition (no tearing of shrinkwrap or mesh bags). Documentation must correspond with the contents of the load, and if required, a treatment certificate must be present.

Export shipping or airfreight containers will be inspected by a freight forwarding agent or exporter for cleanliness and condition (any holes in containers will be taped over). Shipping container details, including soundness and cleanliness, will be recorded on the "Container Report Sheet" (Appendix 3.12) and signed by the Exporter/Airfreight Forwarding Agent. NOTE: it is only necessary to complete the "Container report sheet" for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

9.11 Audits - Exporters

AQIS will perform an annual audit of all exporters registered for the New Zealand program. All relevant documentation for all consignments must be made available to the AQIS authorised Officer.

9.12 Audits -Exporter's Delegate

A minimum of two audits per year will be conducted by AQIS on persons with exporter delegate responsibilities.

9.13 Exporter/Exporter Delegate - Non Compliance

An exporter/exporter delegate may be suspended from the New Zealand program if they are not meeting their obligations under the BQA/IHS. Non-compliance includes:

. failing to provide up to date and correct documentation, including Inspection Records for New Zealand destined product
. failing to correctly draw and sample product
. failing to appropriately train (or be trained), Quality Control inspectors for the purposes of inspecting BQA/IHS product
. failing to segregate BQA/IHS treated/passed for export product from non treated product
. failing to fulfil any other requirement/responsibility as outlined in this section of the Manual.

Additional audits (scheduled by the Senior Inspector (Exports)) will be scheduled where an audit reveals non-conformities occurring within the exporter/exporter delegate responsibilities

The exporter/exporter delegate audit costs will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made between AQIS and the parties involved.

SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES

10.1 Fruit Fly Area Freedom - Management Requirements

10.1.1 Area Freedom - Fruit Flies

For the purpose of the BQA/IHS Arrangement, area freedom from fruit flies is recognised as a treatment. All components of the appendices under the Arrangement are applicable to produce grown in areas free of fruit flies with the treatment being area freedom rather than fumigation, cold disinfestation, etc. Areas considered to be free of fruit flies, unless a current outbreak is declared in the area are;

. Tasmania
. Riverland area of South Australia surrounding the towns/cities of Murtho Renmark, Loxton, Berri, Barmera, Waikerie, Cadell and the township of Mypolonga.
. Sunraysia District of Victoria surrounding the towns/cities of Mildura, Merbein, Nangiloc/Colignan, Robinvale, Nyah and Nyah West, Swan Hill and Barham
. Sunraysia districts of New South Wales surrounding the towns of Dareton, Curlwaa and Coomealla,
. Murrumbidgee Irrigation Area of New South Wales including the towns/cities of Griffith, Leeton and Hillston.

10.1.2 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Surveys to demonstrate that the areas are fruit fly free.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of Fruit Flies and managed under the Tri-state agreement between the States of New South Wales, Victoria and South Australia and

  - which reflect the requirements of New Zealand NASS Standard 158.03.06., the Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

  - management and control procedures for each area which have been submitted to and accepted by MAF as meeting all the requirements (or equivalence) with the New Zealand NASS Standard 158.03.06.

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. These procedures and controls are documented such that they can be readily demonstrated to, and audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

10.1.3 Outbreak

Area freedom will be assumed, unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. one or more larvae or pupae are found in locally grown fruit, or
. two male fruit flies are trapped within 400 metres of each other, within a 14-day period, or
. a single female fly is trapped.

In this case, area freedom from fruit flies will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of NASS Standard 158.03.06, the suspension period will be reduced to;

  - one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site or 30kms should there be two outbreak sites within 3 kms.

State Departments must advise AQIS Canberra Office of any amendments to their management procedures immediately they are intended to be implemented. Canberra Office will forward amendments to these management documents to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (and at least annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable New Zealand NASS Standard 158.03.06.

This Manual at Appendix 2 lists dates of declaration of outbreaks and corresponding generation dates to assess subsequent reinstatement of area freedom for areas which are subjected to outbreak conditions.

10.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom from fruit flies has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency of all traps will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS

11.1 Redback Spiders - *Lactrodectus hasselti*

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern, and have requested MAF to ensure that all consignments of tablegrapes arriving in New Zealand do not have any live pests of this type.

MAF have directed that AQIS must undertake either stringent field control programs to eliminate this pest in the field or undertake an agreed treatment that is effective against red back spiders. A sulphur dioxide - carbon dioxide fumigation treatment has been accepted for this purpose.

The Australian tablegrape industry have opted for mandatory fumigation.

11.2 Treatment details

The mandatory fumigation treatment for redback spiders is a **mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes**.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

Fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Section 3 of this Manual details the requirements and responsibilities which fumigation treatment centres must comply with, and fumigation applied to tablegrapes must meet the listed criteria.

For the phytosanitary certification of tablegrapes, AQIS inspection staff must sight fumigation treatment records. These records must clearly identify the product treated, the date of treatment and the dosage rate and application time of the fumigant. The records must also provide exporter details (where known) packing establishment and grower number details.

Tablegrape fumigators will be audited for compliance with this Section and Section 3 of this Manual.

11.3 Traceability

In the event that a live red back spider is detected in export table grapes, either during exporter, AQIS or MAF inspection, a system must be in place by which that consignment can be traced back to an individual fumigation treatment.

The choice of system is at the packinghouse/treatment centre's discretion. AQIS suggests that packinghouses/treatment centres implement a pallet card system in which a time/date is recorded on the pallet card which correlates with the treatment time/date.

In the event that produce is drawn from a number of fumigation batches to make up a pallet, each block of cartons must be identified on the pallet so as traceback to individual fumigations can be undertaken.

11.4 Additional precautionary measures

In general, packaging used for table grape exports has a high turnover rate. Unused packaging carried over to the following season, however, presents an additional pathway for the introduction of red back spiders into New Zealand. It is therefore necessary to ensure that packaging carried over to the following season does not present a higher level of risk of introducing red back spiders into New Zealand than the table grapes they contain.

Accordingly, measures must be implemented that will ensure the risk of red back spider introduction into New Zealand is minimised. When carrying unused table grape packaging over to the following season, either pest-proofing or disinfestation of the packaging is necessary. AQIS recommends that packaging is pest-proofed, preferably by means of shrink-wrapping, to prevent infestation by red back spiders.

Should pest-proofing of carried over packaging not be a viable option, disinfestation of the packaging prior to export must be undertaken. The accepted treatment, by New Zealand, for red back spiders is a mixed fumigation treatment of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes. Carried over packaging must therefore be subject to this treatment before table grape packaging. In this situation, all requirements for table grape fumigations must be met for table grape packaging (that is, all documentation must be completed).

At the beginning of the table grape season, AQIS staff will randomly check that packinghouses are implementing these requirements.

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

Growers and packinghouses must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

-
-
-
avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

1.1 Avocado, *Persea americana*

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale

Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Mite

Arachnida
Acarina
Tetranychidae

Oligonychus coffeae	tea red spider mite

Fungus

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Mite	
Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	-

Non-regulated non plant pests/organisms

None

BANANA

Musa spp.

The export of Bananas to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera jarvisi	Javis' fruit fly
Bactrocera papayae	papaya fruit fly
Bactrocera tryoni	Queensland fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) are allowed as corrective action.

Insecta	
Coleoptera	
Chrysomelidae	
Geloptera miracula	chrysomelid beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida discopunctulata	leaf beetle
Curculionidae	
Cosmopolites sordidus	banana root borer
Listroderes difficilis	vegetable weevil
Polytus mellerborgi	weevil borer
Scarabaeidae	
Dermolepida albohirtum	greyback cane beetle
Rhopaea magnicornis	large pasture scarab
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Calliphoa imperialis	blow fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug

Fabrictilis australis	squash bug
Lygaeidae	
Graptostethus servus	lygaeid bug
Homoptera	
Aleyrodidae	
Aleurodicus spiniferis	coconut whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophyllis	cyanophyllum scale
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Pseudococcidae	
Planococcus pacificus	citrus mealybug
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Lepidoptera	
Lymantriidae	
Orgyia australis	vapourer moth
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Helicoverpa assulta	cape gooseberry budworm
Hermimia cenoealis	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Lamprosema octasema	banana scab moth
Tirathaba rufivena	fruit borer
Tineidae	
Opogona glycyphaga	sugarcane bud moth
Torticidae	
Isotenes miserana	orange fruitborer
Xenothictis sciaphila	tortricid
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Thysanoptera	
Thripidae	
Chaetanaphothrips signipennis	banana rust thrips
Thrips florum	flower thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phyllocoptruta musae	eriophyid mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Tetranychus marianae	bean mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia musae (anamorph *Phyllostict musae)*	-
Phyllachorales	
Phyllachoraceae	
Phyllachora musicola	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis musicola	-
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora hayi	-
Deightoniella torulosa	-
Moniliaceae	
Verticillium theobromae	-
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora palmivora	phytophthora fruit rot

Reglulated non-quarantine pests
None

Regulated non plant pests/unwanted organisms
None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Insect
- **Insecta**
  - **Coleoptera**
    - **Scarabaeidae**
      - *Heteronychus arator* — black beetle
  - **Homoptera**
    - **Coccidae**
      - *Coccus hesperidum* — brown soft scale
    - **Diaspididae**
      - *Aspidiotus nerii* — oleander scale
      - *Hemiberlesia lataniae* — latania scale
      - *Pinnaspis aspidistrae* — fern scale
    - **Pseudococcidae**
      - *Planococcus citri* — citrus mealybug
  - **Lepidoptera**
    - **Noctuidae**
      - *Chrysodeixis eriosoma* — green garden looper
      - *Spodoptera litura* — cluster caterpillar
  - **Thysanoptera**
    - **Thripidae**
      - *Hercinothrips bicinctus* — banana silvering thrips

Mite
- **Arachnida**
  - **Acarina**
    - **Tarsonemidae**
      - *Polyhagotarsonemus latus* — broad mite
    - **Tenuipalpidae**
      - *Brevipalpus californicus* — bunch mite
      - *Brevipalpus phoenicis* — passionvine mite
    - **Tetranychidae**
      - *Tetranychus lambi* — strawberry spider mite
      - *Tetranychus urtiae* — twospotted spider mite

Fungus
- **Ascomycota**
  - **Microascales**
    - **Unknown Microascales**
      - *Ceratocystis paradoxa* (anamorph *Chalara paradoxa*)
  - **Unknown Ascomycota**
    - **Magnaporthaceae**
      - *Magnaporthe grisea* (anamorph *Pyriculara grisea*)

Non-regulated non plant pests/organisms

None

CAPSICUM
Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the BQA/IHS**
- **Appendices 4 (dimethoate treatment) and 10 (field control programmes) to the BQA/IHS.**

A number of Risk Group 2 pests are listed for capsicums, and AQIS can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the BQA) would also control *B. bryoniae* should it occur.
4. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the BQA) would also control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. If by chance *B. tabaci* were present on harvested capsicum fruit as a hitch-hiker, the pre-export dimethoate spray treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
5. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
6. Historical records show that *B. tabaci* has never been detected on capsicum fruit during AQIS pre-export inspection.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.

2. If *T. palmi* were present on harvested capsicum fruit, the pre-export dimethoate spray treatment (appendix 4 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on capsicum fruit during AQIS pre-export inspection.

Monilinia fructigena

1. This fungi does not occur in Australia.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
*Bactrocera kraussi**	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci [vect.]	-
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Fungus	

1.3 Capsicum, *Capsicum annuum*

Ascomycota
Leotiales
Sclerotiniaceae
Monilinia fructigena (anamorph *Monilia fructigena*) — European brown rot

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta
Coleoptera
Coccinellidae
Epilachna vigintioctopunctata — 28-spot ladybird
Curculionidae
Listroderes difficilis — vegetable weevil
Tenebrionidae
Gonocephalum carpentariae — false wireworm
Diptera
Muscidae
Atherigona orientalis — muscid fly
Tephritidae
Dirioxa pornia — island fruit fly
Hemiptera
Lygaeidae
Nysius vinitor — Rutherglen bug
Pentatomidae
Plautia affinis — green stink bug
Pyrrhocoridae
Dindymus versicolor — harlequin bug
Rhopalidae
Leptocoris mitellatus — leptocoris bug
Homoptera
Aleyrodidae
Aleurodicus dispersus — spiralling whitefly
Trialeurodes vaporariorum [strain] — greenhouse whitefly
Cicadellidae
Austroasca viridigrisea — vegetable leafhopper

Coccidae
Chloropulvinaria psidii — guava scale
Pulvinaria urbicola — cottony maple scale
Diaspididae
Pseudaulacaspis pentagona — white peach scale
Unaspis citri — citrus snow scale
Margarodidae
Icerya seychellarum — Seychelles scale
Pseudococcidae
Dysmicoccus brevipes — pineapple mealybug
Planococcus minor — Pacific mealybug
Lepidoptera
Noctuidae
Helicoverpa assulta — cape gooseberry budworm

1.3 Capsicum, *Capsicum annuum*

Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Nectria haematococca var. *brevicona*	dry rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata f. sp. *lycopersici*	-
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *vasinfectum*	fusarium wilt
Pythiales	
Pythiaceae	
Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak
Virus	
-	
-	
-	
tobacco leaf curl bigeminivirus [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-
Weed	
Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf

1.3 Capsicum, *Capsicum annuum*

Xanthium spp. (except *X. spinosum*)	bur
Caryophyllales	
Amaranthaceae	
Amaranthus spp.	amaranthus
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Listroderes costirostris	vegetable weevil
Listroderes obliquus	vegetable weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Myzus persicae	green peach aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Pyralidae	
Sceliodes cordalis	poroporo fruit borer
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculops lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

1.3 Capsicum, *Capsicum annuum*

Fungus

Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli*)	phomopsis stem rot
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease

Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phoma destructiva	bulb rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Bacterium	
-	
-	
Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	

1.3 Capsicum, *Capsicum annuum*

Agrobacterium tumefaciens	crown gall

Weed
Angiospermae
Asterales
Asteraceae

Galinsoga parviflora	
Sonchus spp.	sowthistle

Poales
Poaceae

Echinochloa spp.	grasses
Eleusine indica	goose grass
Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta
Coleoptera

Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly

1.4 Citrus, *Citrus* spp.

Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer

Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	

Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth

Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non plant pests/organisms

None

CUCUMBER

Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme),**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for cucumbers. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested cucumber fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested cucumber fruit, the pre-export dimethoate dip treatment (appendix 8 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Cucumbers exported to New Zealand under appendix 4 and 10 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

1.5 Cucumber, *Cucumis sativus*

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	

1.5 Cucumber, *Cucumis sativus*

Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cladosporium cucumerinum	--
Moniliaceae	
Verticillium albo-atrum [severe strain]	progressive wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--

1.5 Cucumber, *Cucumis sativus*

Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Virus

-	
-	
-	
tobacco ringspot nepovirus [strain] [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

1.5 Cucumber, *Cucumis sativus*

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould

1.5 Cucumber, *Cucumis sativus*

Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	

1.5 Cucumber, *Cucumis sativus*

Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

GRAPE

Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Growers and packinghouses must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk Group 2 pests Conogethes punctiferalis. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

1.6 Grape, *Vitis vinifera*

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample.
Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug

Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail
Fungus	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	-
Coniella diplodiella	white rot

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria vitis	leaf disease
Cladosporium viticola	cladosporium leaf spot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except *X. spinosum*) [contaminant]	bur
Geraniales	
Zygophyllaceae	
Tribulus terrestris [contaminant]	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae
Latrodectus hasselti Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite
Arachnida
Acarina
Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tenuipalpidae

Brevipalpus californicus	bunch mite

Tetranychidae

Panonychus ulmi	European red mite
Tetranychus urticae	twospotted spider mite

Mollusc
Gastropoda
Stylommatophora
Helicidae

Helix aspersa	common garden snail

Fungus
Ascomycota
Diatrypales
Diatrypaceae

Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback

Dothideales
Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker

Elsinoaceae

Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose

Mycosphaerellaceae

Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot

Erysiphales
Erysiphaceae

Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew

Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	-
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	-
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	-
Digitaria violascens [contaminant]	-
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass

Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	-
Pennisetum macrourum [contaminant]	African feather grass
Solanales	
Solanaceae	
Lycium barbarum [contaminant]	boxthorn
Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

MANGO
Mangifera indica

The export of Mango to New Zealand is prohibited at this time.
Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Aspidiotus destructor	coconut scale
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Ischnaspis longirostris	black thread scale
Phenacaspis dilatata	mango scale
Flatidae	
Colgaroides acuminata	mango planthopper
Lepidoptera	
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Penicillaria jocosatrix	mango shoot caterpillar
Peperita euthysticha	mango tipborer
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Regulated non-quarantine pests

None

Regulated non-plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Sternochetus mangiferae	mango seed weevil
Homoptera	
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite

Non-regulated non plant pests/organisms

None

MELON
Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New

Zealand under appendices 4 and 11 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.

2. Melons exported to New Zealand under appendix 4 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Pest Scientific Name	Common Name
Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments	
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly
Quarantine: Risk group 2 pests (actionable) - Management Control Systems	
Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite
Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.	
Insect	
Insecta	
Coleoptera	
Cerambycidae	

Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid

Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	-

Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight
Bacterium	
-	
-	
Pseudomonadaceae	
Acidovorax avenae subsp. *citrulli*	bacterial rot
Virus	
-	
-	
-	
tobacco ringspot nepovirus [strain] [VO]	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus	
Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata (anamorph *Fusarium lateritium*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	

Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	

Pseudomonadaceae

Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

PAPAYA

Carica papaya

The export of Papaya to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha suspensa	Caribbean fruit fly
Bactrocera cucurbitae	melon fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Homoptera	
Cicadellidae	
Orosius argentatus	brown leafhopper
Diaspididae	
Aonidiella orientalis	oriental yellow scale
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

1.9 Papaya, *Carica papaya*

Mite

Arachnida
Acarina
Tetranychidae

Tetranychus desertorum	desert spider mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Mite	
Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus phoenicis	passionvine mite

Non-regulated non plant pests/organisms

None

PINEAPPLE

Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarnatine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug

Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla	
Unknown Symphyla	
Symphylidae	
Hanseniella sp.	symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetes	
Dematiaceae	
Thielaviopsis paradoxa	
Moniliaceae	
Penicillium funiculosum	

Bacterium

-	
-	
Enterobacteriaceae	
Erwinia ananas	marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae

Iridomyrmex glaber	black house ant
Paratrechina vaga	ant
Tapinoma sp.	ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin's flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps
Mite	
Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite
Nematode	
Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	

Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus

-
-
-

tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	**Common Name**
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

POMEGRANATE

Punica granatum

Pomegranates are not permitted export to New Zealand at this time.

Growers and packinghouses of pomegranate do not need to be specifically registered for the New Zealand program requirements.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Hemiptera	
Lygaeidae	
Oxycarenus arctatus	coon bug
Homoptera	
Aphididae	
Aphis spiraecola	spirea aphid

1.11 Pomegranate, *Punica granatum*

Lepidoptera
Pyralidae
Ectomyelois sp. carob moth

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Aphididae	
Aphis gossypii	cotton aphid
Aulacorthum circumflexum	mottled arum aphid
Myzus ornatus	ornate aphid
Myzus persicae	green peach aphid
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus spp.	spider mites

Non-regluated non plant pests/organisms

None

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil
Orthorhinus aethops	weevil

Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

1.12 Strawberry, *Fragaria* spp.

Myriapod

Diplopode
Julida
Blaniulidae

Blaniulua guttulatus	spotted snake millipede

Mollusc

Gastropoda
Stylommatophora
Helicidae

Helix aspersa	common garden snail

Limacidae

Deroceras panormitanum	brown field slug
Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and 10 (field control programmes)**

Only the tomato varieties, Floradade, Tristar, Hayslip, Sunny and Duke can be exported under the Dimethoate Treatment Appendix No. 4 to the BQA/IHS. Growers and packhouses that are growing/packing tomatoes for export to New Zealand under appendix 4 to the BQA must be registered for this purpose.

Tomatoes supplied under the Area Freedom Treatment Appendix No.2 of the BQA/IHS can be of any variety, but the variety name should be included on the phytosanitary certificate.

A number of Risk Group 2 pests have been listed for tomatoes. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested tomato fruit as a hitch-hiker, the pre-export dimethoate spray/dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on tomato fruit during AQIS pre-export inspection.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested tomato fruit, the pre-export dimethoate spray/dip treatment (appendix 4 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on tomato fruit during AQIS pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export application of dimethoate spray to tomatoes (appendix 4 to the BQA) would also control *B. musae* should it occur.
4. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. musae* has never been detected on tomato fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

1.13 Tomato, *Lycopersicon esculentum*

Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	
Antherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm

Thysanoptera
Thripidae

Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips

Fungus

Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak

Virus

-
-
-

tobacco ringspot nepovirus [strain] [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Phytoplasma

-
-
-

tomato big bud phytoplasma	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Mite	
Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

1.13 Tomato, *Lycopersicon esculentum*

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Zygomycota: Zygomycetes	

1.13 Tomato, *Lycopersicon esculentum*

Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot

Non-regulated non plant pests

None

WATERMELON
Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for watermelons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the BQA) would kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

1.14 Watermelon, *Citrullus lanatus*

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida
Acarina
Acaridae
Tyrophagus dimidiatus mushroom mite
Tetranychidae
Eutetranychus orientalis pear leaf blister mite
Tetranychus desertorum desert spider mite
Tetranychus lombardinii southern lobed mite
Tetranychus neocaledonicus Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Ascochyta spp. -
Phomopsis cucurbitae --

Oomycota
Pythiales
Pythiaceae
Pythium spp. pythium rot

Bacterium

-
-
Enterobacteriaceae
Erwinia tracheiphila bacterial wilt
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* bacterial rot

1.14 Watermelon, *Citrullus lanatus*

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta
Hymenoptera
Formicidae
Solenopsis geminata fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida

1.14 Watermelon, *Citrullus lanatus*

Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite
Fungus	
Ascomycota	
Dothideales	
Pleosporaceae	
Leptosphaerulina trifolii	seed rot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--

1.14 Watermelon, *Citrullus lanatus*

Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phoma exigua	phoma rot
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Bacterium	
-	
-	
Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI

Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip)**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for zucchinis and scallopinis. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested zucchini fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on zucchini fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to zucchini and scallopini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 11(winter window) to the BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Zucchinis exported to New Zealand under Appendix 4 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Promecotheca bryanti	-
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Graphognathus peregrinus	weevil
Hemiptera	

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Pseudaulacaspis pentagona	white peach scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Tiracola plagiata	banana fruit caterpillar
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida
Acarina
Acaridae

Tyrophagus dimidiatus	mushroom mite

Tetranychidae

Bryobia spp.	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Hyphomycetes)
Tuberculariales
Tuberculariaceae

Fusarium oxysporum f. sp. *melonis*	--

Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot

Zygomycota: Zygomycetes
Mucorales
Choanephoraceae

Choanephora cucurbitarum	blight

Virus

-
-
-

tobacco ringspot nepovirus [strain] [VO]	-

Phytoplasma

-
-
-

tomato big bud phytoplasma	-

Regulated non-quarantine pests

None

Regulated non plant pests

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Insect

Insecta
Hymenoptera
Formicidae

Solenopsis geminata	fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Stratiomyidae	
Inopus rubriceps	Australian soldier fly
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Diaspididae	
Aspidiotus nerii	oleander scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Heliothrips haemorrhoidalis	greenhouse thrips
Parthenothrips dracaenae	palm thrips

Mite

Arachnida
Acarina
Acaridae

Tyrophagus putrescentiae	mould mite

Eupodidae

Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tetranychidae

Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Unknown Dothideales

Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot

Erysiphales
Erysiphaceae

Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew

Hypocreales
Hypocreaceae

Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Microascales	
Unknown Microascales	
Ceratocystis paradoxa (anamorph *Chalara paradoxa*)	ceratocystis rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Ralstonia solanacearum	bacterial wilt
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

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APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT

DAY LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	01 - Feb	01 - Mar	05 - Mar	27 - Apr
02 - Jan	02 - Feb	02 - Mar	06 - Mar	03 - May
03 - Jan	03 - Feb	03 - Mar	07 - Mar	05 - May
04 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
05 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
06 - Jan	05 - Feb	05 - Mar	09 - Mar	16 - May
07 - Jan	06 - Feb	06 - Mar	11 - Mar	19 - Sep
08 - Jan	07 - Feb	07 - Mar	13 - Mar	25 - Sep
09 - Jan	08 - Feb	08 - Mar	14 - Mar	30 - Sep
10 - Jan	09 - Feb	09 - Mar	16 - Mar	02 - Oct
11 - Jan	10 - Feb	10 - Mar	17 - Mar	04 - Oct
12 - Jan	11 - Feb	11 - Mar	18 - Mar	06 - Oct
13 - Jan	12 - Feb	12 - Mar	19 - Mar	08 - Oct
14 - Jan	13 - Feb	13 - Mar	20 - Mar	10 - Oct
15 - Jan	14 - Feb	14 - Mar	21 - Mar	11 - Oct
16 - Jan	15 - Feb	15 - Mar	23 - Mar	11 - Oct
17 - Jan	16 - Feb	16 - Mar	25 - Mar	12 - Oct
18 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
19 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
20 - Jan	19 - Feb	19 - Mar	30 - Mar	18 - Oct
21 - Jan	20 - Feb	20 - Mar	02 - Apr	23 - Oct
22 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
23 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
24 - Jan	23 - Feb	23 - Mar	04 - Apr	25 - Oct
25 - Jan	24 - Feb	24 - Mar	07 - Apr	28 - Oct
26 - Jan	25 - Feb	25 - Mar	09 - Apr	29 - Oct
27 - Jan	26 - Feb	26 - Mar	11 - Apr	31 - Oct
28 - Jan	27 - Feb	27 - Mar	12 - Apr	01 - Nov
29 - Jan	28 - Feb	28 - Mar	14 - Apr	02 - Nov
30 - Jan	02 - Mar	30 - Mar	17 - Apr	04 - Nov
31 - Jan	03 - Mar	31 - Mar	21 - Apr	07 - Nov
01 - Feb	04 - Mar	01 - Apr	23 - Apr	08 - Nov
02 - Feb	05 - Mar	02 - Apr	27 - Apr	10 - Nov
03 - Feb	06 - Mar	03 - Apr	03 - May	13 - Nov
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09 - Feb	14 - Mar	11 - Apr	30 - Sep	27 - Nov

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11 - Feb	17 - Mar	14 - Apr	04 - Oct	29 - Nov
12 - Feb	18 - Mar	15 - Apr	06 - Oct	29 - Nov
13 - Feb	19 - Mar	16 - Apr	08 - Oct	30 - Nov
14 - Feb	20 - Mar	17 - Apr	10 - Oct	01 - Dec
15 - Feb	21 - Mar	18 - Apr	11 - Oct	02 - Dec
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2.1 Sunraysia district

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2.1 Sunraysia district

21 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb
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13 - Dec	14 - Jan	11 - Feb	14 - Feb	21 - Mar

2.1 Sunraysia district

14 - Dec	15 - Jan	12 - Feb	15 - Feb	23 - Mar
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29 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
30 - Dec	30 - Jan	27 - Feb	03 - Mar	21 - Apr
31 - Dec	31 - Dec	28 - Feb	04 - Mar	23 - Apr

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	03 - Feb	03 - Mar	11 - Mar	19 - Oct
02 - Jan	04 - Feb	04 - Mar	12 - Mar	19 - Oct
03 - Jan	05 - Feb	05 - Mar	13 - Mar	19 - Oct
04 - Jan	06 - Feb	06 - Mar	15 - Mar	20 - Oct
05 - Jan	07 - Feb	07 - Mar	16 - Mar	21 - Oct
06 - Jan	08 - Feb	08 - Mar	18 - Mar	24 - Oct
07 - Jan	09 - Feb	09 - Mar	19 - Mar	24 - Oct
08 - Jan	11 - Feb	11 - Mar	22 - Mar	27 - Oct
09 - Jan	12 - Feb	12 - Mar	25 - Mar	29 - Oct
10 - Jan	13 - Feb	13 - Mar	27 - Mar	31 - Oct
11 - Jan	14 - Feb	14 - Mar	30 - Mar	03 - Nov
12 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
13 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
14 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
15 - Jan	16 - Feb	16 - Mar	04 - Apr	06 - Nov
16 - Jan	17 - Feb	17 - Mar	07 - Apr	09 - Nov
17 - Jan	18 - Feb	18 - Mar	09 - Apr	10 - Nov
18 - Jan	19 - Feb	19 - Mar	11 - Apr	11 - Nov
19 - Jan	20 - Feb	20 - Mar	14 - Apr	13 - Nov
20 - Jan	22 - Feb	22 - Mar	18 - Apr	16 - Nov
21 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
22 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
23 - Jan	24 - Feb	24 - Mar	23 - Apr	18 - Nov
24 - Jan	25 - Feb	25 - Mar	02 - May	21 - Nov
25 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
26 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
27 - Jan	01 - Mar	29 - Mar	27 - Sep	01 - Dec
28 - Jan	02 - Mar	30 - Mar	30 - Sep	02 - Dec
29 - Jan	03 - Mar	31 - Mar	02 - Oct	03 - Dec
30 - Jan	04 - Mar	01 - Apr	05 - Oct	05 - Dec
31 - Jan	05 - Mar	02 - Apr	09 - Oct	07 - Dec
01 - Feb	06 - Mar	03 - Apr	10 - Oct	07 - Dec
02 - Feb	08 - Mar	05 - Apr	13 - Oct	09 - Dec
03 - Feb	10 - Mar	07 - Apr	19 - Oct	10 - Dec
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11 - Feb	20 - Mar	17 - Apr	25 - Oct	13 - Dec
12 - Feb	22 - Mar	19 - Apr	27 - Oct	15 - Dec
13 - Feb	25 - Mar	22 - Apr	29 - Oct	16 - Dec
14 - Feb	27 - Mar	24 - Apr	31 - Oct	17 - Dec
15 - Feb	30 - Mar	27 - Apr	03 - Nov	19 - Dec
16 - Feb	31 - Mar	28 - Apr	04 - Nov	20 - Dec

2.2 Riverland district

17 - Feb	04 - Apr	02 - May	06 - Nov	21 - Dec
18 - Feb	07 - Apr	05 - May	09 - Nov	23 - Dec
19 - Feb	09 - Apr	07 - May	10 - Nov	24 - Dec
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22 - Feb	15 - Apr	13 - May	14 - Nov	26 - Dec
23 - Feb	18 - Apr	16 - May	16 - Nov	28 - Dec
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25 - Feb	23 - Apr	21 - May	18 - Nov	29 - Dec
26 - Feb	02 - May	30 - May	21 - Nov	31 - Dec
27 - Feb	05 - May	02 - Jun	22 - Nov	31 - Dec
28 - Feb	08 - Sep	06 - Oct	27 - Nov	05 - Jan
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27 - Mar	30 - Oct	27 - Nov	16 - Dec	20 - Jan
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2.2 Riverland district

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2.2 Riverland district

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2.2 Riverland district

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20 - Sep	29 - Nov	27 - Dec	07 - Jan	11 - Feb

2.2 Riverland district

21 - Sep	29 - Nov	27 - Dec	07 - Jan	11 - Feb
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25 - Sep	30 - Nov	28 - Dec	07 - Jan	11 - Feb
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2.2 Riverland district

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30 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
31 - Dec	03 - Feb	03 - Mar	11 - Mar	19 - Oct

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	31 - Jan	28 - Feb	10 - Mar	16 - Oct
02 - Jan	02 - Feb	02 - Mar	12 - Mar	18 - Oct
03 - Jan	03 - Feb	03 - Mar	15 - Mar	20 - Oct
04 - Jan	04 - Feb	04 - Mar	16 - Mar	22 - Oct
05 - Jan	05 - Feb	05 - Mar	17 - Mar	22 - Oct
06 - Jan	06 - Feb	06 - Mar	19 - Mar	24 - Oct
07 - Jan	07 - Feb	07 - Mar	22 - Mar	25 - Oct
08 - Jan	08 - Feb	08 - Mar	24 - Mar	27 - Oct
09 - Jan	09 - Feb	09 - Mar	27 - Mar	28 - Oct
10 - Jan	10 - Feb	10 - Mar	28 - Mar	29 - Oct
11 - Jan	11 - Feb	11 - Mar	02 - Apr	31 - Oct
12 - Jan	12 - Feb	12 - Mar	04 - Apr	01 - Nov
13 - Jan	14 - Feb	14 - Mar	10 - Apr	05 - Nov
14 - Jan	15 - Feb	15 -Mar	16 - Apr	08 - Nov
15 - Jan	16 - Feb	16 - Mar	30 - Aug	13 - Nov
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17 - Jan	18 - Feb	18 - Mar	15 - Sep	16 - Nov
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21 - Jan	23 - Feb	23 - Mar	30 - Sep	22 - Nov
22 - Jan	24 - Feb	24 - Mar	02 - Oct	23 - Nov
23 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
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25 - Jan	28 - Feb	28 - Mar	07 - Oct	25 - Nov
26 - Jan	01 - Mar	29 - Mar	07 - Oct	25 - Nov
27 - Jan	03 - Mar	31 - Mar	09 - Oct	25 - Nov
28 - Jan	04 - Mar	01 – Apr	09 – Oct	25 - Nov
29 - Jan	06 - Mar	03 - Apr	12 - Oct	27 - Nov
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09 - Oct	25 - Nov	23 - Dec	31 - Dec	31 - Jan
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14 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
15 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
16 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
17 - Oct	30 - Nov	28 - Dec	04 - Jan	05 - Feb
18 - Oct	01 - Dec	29 - Dec	04 - Jan	05 - Feb
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22 - Oct	04 - Dec	01 - Jan	07 - Jan	08 - Feb
23 - Oct	04 - Dec	01 - Jan	07 - Jan	08 - Feb
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31 - Oct	10 - Dec	07 - Jan	12 - Jan	14 - Feb
01 - Nov	11 - Dec	08 - Jan	13 - Jan	15 - Feb
02 - Nov	12 - Dec	09 - Jan	14 - Jan	16 - Feb
03 - Nov	12 - Dec	09 - Jan	14 - Jan	16 - Feb
04 - Nov	13 - Dec	10 - Jan	15 - Jan	17 - Feb
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06 - Nov	14 - Dec	11 - Jan	16 - Jan	18 - Feb
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19 - Nov	25 - Dec	22 - Jan	26 - Jan	03 - Mar
20 - Nov	25 - Dec	22 - Jan	26 - Jan	03 - Mar
21 - Nov	26 - Dec	23 - Jan	27 - Jan	04 - Mar
22 - Nov	27 - Dec	24 - Jan	28 - Jan	06 - Mar

2.3 MIA-Riverina

23 - Nov	28 - Dec	25 - Jan	29 - Jan	07 - Mar
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29 - Nov	02 - Jan	30 - Jan	03 - Feb	15 - Mar
30 - Nov	03 - Jan	31 - Jan	04 - Feb	16 - Mar
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03 - Dec	05 - Jan	02 - Feb	06 - Feb	19 - Mar
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07 - Dec	09 - Jan	06 - Feb	10 - Feb	28 - Mar
08 - Dec	11 - Jan	08 - Feb	12 - Feb	04 - Apr
09 - Dec	11 - Jan	08 - Feb	12 - Feb	04 - Apr
10 - Dec	11 - Jan	08 - Feb	12 - Feb	04 - Apr
11 - Dec	12 - Jan	09 - Feb	14 - Feb	10 - Apr
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13 - Dec	14 - Jan	11 - Feb	16 - Feb	30 - Aug
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15 - Dec	16 - Jan	13 - Feb	18 - Feb	15 - Sep
16 - Dec	17 - Jan	14 - Feb	19 - Feb	17 - Sep
17 - Dec	18 - Jan	15 - Feb	20 - Feb	22 - Sep
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19 - Dec	19 - Jan	16 - Feb	21 - Feb	25 - Sep
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23 - Dec	23 - Jan	20 - Feb	27 - Feb	06 - Oct
24 - Dec	24 - Jan	21 - Feb	28 - Feb	07 - Oct
25 - Dec	25 - Jan	22 - Feb	01 - Mar	07 - Oct
26 - Dec	26 - Jan	23 - Feb	03 - Mar	09 - Oct
27 - Dec	27 - Jan	24 - Feb	04 - Mar	09 - Oct
28 - Dec	28 - Jan	25 - Feb	06 - Mar	12 - Oct
29 - Dec	29 - Jan	26 - Feb	07 - Mar	13 - Oct
30 - Dec	30 - Jan	27 - Feb	09 - Mar	15 - Oct
31 - Dec	30 - Jan	27 - Feb	09 - Mar	15 - Oct

APPENDIX 3 FORMS

3.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
POSTAL OR BUSINESS ADDRESS			
	POST CODE		
PROPERTY ADDRESS			
	POST CODE		
REAL PROPERTY DESCRIPTION (of area under planting)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operational Manual - Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Cucurbits (type)
Citrus	Tomato

3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION

APPLICATION FOR PACKER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS		
NAME OF PACKER		
AQIS REE NUMBER (if applicable)		
POSTAL ADDRESS		
	POST CODE	
PREMISES ADDRESS		
	POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a packer of .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operational Manual - Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to packers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Cucurbits (type)
Citrus	Tomato

3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT EXPORTER REGISTRATION AND INSPECTION APPLICATION

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Version 3 of the Australian - New Zealand Bilateral Quarantine Arrangement and the BQA Systems Operational Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the BQA and the Systems Operational Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for BQA commodities will provide properly identified Inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection
The following persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Appendix 3.3

Treatment Loading Supervision Authority

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the BQA for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of BQA commodities as is required by the BQA and the contents of this Manual.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the BQA and the Systems Operation Manual Version 3 of May 1999 required for inspection purposes

Name of Applicant .....

Signature .....

Date .....

3.4 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Date	Trade Description	Tick
Commodity	Commodity	
No of Cartons	Registered Grower No.	
Registered Grower No.	Registered Packing Establishment	
	.....	
Ex 28 Number/s:	Australian Origin	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250	
Exporter/s	(Tick one)	
	Exporter Inspection completed by:.....	
	(a) Exporter	
Inspector Name	(b) Exporter delegate (name)	
(Block Letters)	**Inspected by**:	
.....	Grower Line	
Inspector's Signature	Consignment Line	

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NQ**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed **Failed** **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Quarantine Pes

3.5 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	Number of Cartons/Commodity	Temperatures Taken *

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

Appendix 3.5

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

3.6 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKING HOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0$C.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS						INITIALS				
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor					

3.7 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand that should I/we wish to re-enter the Arrangement protocol at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in block letters	Signature	Date
.....	.....	.....

Voluntary Withdrawal

I/we agree that my/our property is no longer required to be registered under the terms and conditions that are required for the New Zealand export trade for BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand that should I/we wish to re-enter the Arrangement at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in Block letters	Signature	Date
.....	.....	.....

AQIS OFFICE DOCUMENTATION
Fax to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or
Inspector's Signature

.....

3.8 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection of the following property/premises:- (Grower - Packer) (delete one)

Name .....
Address .....
.....
.....
Reg No .....

I believe that for the following reasons that the above Grower/Company no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) that they have no intention to correct the above mentioned deficiency in the immediate future.

I hereby declare that the above mentioned grower/packer is suspended from the Australia - New Zealand BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Grower Name	Grower's Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

3.9 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY ALL TOMATO CONSIGNMENTS TO BRISBANE, FROM TOWNSVILLE, BUNDABERG OR CAIRNS

DECLARATION OF TREATMENT

I, ... of .....

.....

hereby declare that the ..... number of tomatoes consigned to

.....on .....(date)

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute.

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

2. nominate a sample size of 600/950/1250* fruits to be inspected from each lot. (*Delete as applicable)

   AND

3. further declare that .....(insert name of supervisor) a designated person nominated by .....(insert name of exporter) has supervised the loading of this consignment for transport to .....

   .....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....19.....

Signature ..... Witness .....

3.10 TOMATO VARIETY DECLARATION

TOMATO VARIETY DECLARATION

PRODUCTION OF TOMATOES FOR EXPORT TO NEW ZEALAND

I, ... registered

New Zealand Grower No.....declare the tomatoes supplied

by me on the ..... to .....…

are of the variety ....., and these tomatoes were

harvested from the following registered block/s……

……

Signed ..... Dated .....……

Appendix 3.11

3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the BQA Systems Operational Manual Version 3 of May 1999 and have the ability to recognise and identify the pests and weed seeds that are contained in the MPL's for quarantine pests.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the BQA and the Instructions contained in the Operations Manual for Australian New Zealand BQA.

Appendix 3.11

Signature .....
Printed Name ..... Date .....

Approved ..... Senior Inspector/Superving Inspector
Date ..... Seal/Stamp .....

3.12 CONTAINER HYGIENE REPORT

CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28 Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

3.13 STATUTORY DECLARATION

THE OATHS ACTS - 1867-1960

STATUTORY DECLARATION

State to wit .....

I (Name)..... of
address.....
in the State of..... do solemnly and sincerely declare that:

Product (name)..... supplied to (exporter/packinghouse, name and address
.....
.....have been grown under the AQIS/MAF protocol procedures for export of such produce to New Zealand.

My registered grower number is ..... and is current and the conditions as required by the BQA for growers have been complied with.

The produce aforementioned was loaded under my supervision on the (date).....
and comprised ..... Bins or ..... Tonnes Bulk and was loaded onto registered truck no. ..... and trailer no.....

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of "The Oaths Acts 1867-1960"

.....Signature .....

A Justice of Peace

3.14 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare that the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

3.15 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

<table>
<tr><td rowspan="3">Grower name and address:</td><td>Cucurbit type (please tick ✓)
Cucumber ☐
Honeydew melon ☐
Rockmelon ☐
Scallopini ☐
Watermelon ☐
Zucchini ☐</td><td>Treatment (please tick ✓)
Appendix 3 & 10 (methyl bromide) ☐
Appendix 4 & 10 (dimethoate dip) ☐
Appendix 10 & 11 (winter window) ☐</td></tr>
<tr><td colspan="2">Declaration

I,……hereby declare that the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.

…… ……/……/……
Signature Date</td></tr>
<tr><td>Grower number:</td></tr>
<tr><td>Consignee name and address:</td><td colspan="2"></td></tr>
</table>

Production block number	Package type (carton, bin etc)	Number of packages	Total mass

australia - new zealand bilateral quarantine arrangement

systems operation manual - amendment 5

Department of AGRICULTURE FISHERIES & FORESTRY - AUSTRALIA

AUSTRALIAN QUARANTINE AND INSPECTION SERVICE

AGRICULTURE, FISHERIES AND FORESTRY - AUSTRALIA

This systems operation manual incorporates the New Zealand import health standards for Australian fruit fly host material and the Australian Quarantine and Inspection service's operational requirements.

This manual is maintained and controlled by the AQIS Plant Programs Section in Canberra.

The Australian Quarantine and Inspection Service (AQIS) is an agency within the Commonwealth Department of Agriculture, Fisheries and Forestry - Australia.

New Zealand\Bqasom\NZSOM-amendment4.doc

March 2001

SYSTEMS OPERATIONS MANUAL

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT INCORPORATING THE NEW ZEALAND IMPORT HEALTH STANDARDS AND AQIS OPERATIONS REQUIREMENTS

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES ..... **VI**

AMENDMENT RECORD ..... **VIII**

GLOSSARY OF TERMS ..... **X**

DEFINITIONS ..... **XI**

INTRODUCTION **1**

SECTION 1. BACKGROUND **1**

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements ***1***

1.2 Scope of the Manual ***2***

SECTION 2. PEST CATEGORIES **1**

2.1 Pest Category Classifications ***1***

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS 1

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS 1

2.1.3 International Phytosanitary Certificate (IPC) Pests - Risk Group 1 - PESTS 2

2.2 Maximum Pest Levels ***2***

2.3 Contaminants ***1***

SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS **1**

3.1 Country freedom from fruit flies (based on NASS Standard 158.03.07) ***1***

3.2 Area freedom districts within Australia (based on NASS standard 158.03.06) ***1***

3.2.1 Approved area freedom districts 3

3.2.1.1 Riverina - MIA 3

3.2.1.2 Sunraysia - Victoria and New South Wales 3

3.2.1.3 Riverland - South Australia 3

3.2.1.4 Tasmania 3

3.2.2 Registration requirements 4

3.2.3 Post treatment security - area freedom 5

3.2.4 Post treatment transportation of product to export loading points 5

3.2.5 Phytosanitary certification endorsements 6

3.3 Methyl bromide fumigation ***7***

3.3.1 Registration requirements 7

3.3.2 Treatment details and fumigator responsibilities 8

3.3.3 Post treatment security - methyl bromide fumigation 10

3.3.4 Post treatment transportation of product to export loading point 10

3.3.5 Phytosanitary certificate endorsements 10

3.4. Dimethoate dip/spray ***12***

3.4.1 Registration requirements 12

3.4.2 Treatment details and treatment centre responsibilities 14

3.4.3 Post treatment security - chemical dipping/spraying 15

3.4.4 Post treatment transportation of product to export loading point 15

3.4.5 Phytosanitary certificate endorsements 16

3.5 Cold Storage ***18***

3.5.1 Registration requirements 18

3.5.2 Treatment details and treatment centre responsibilities 19

3.5.2.1 Cold disinfestation procedures 19

3.5.2.2 Temperature recording 19

3.5.2.3 Record requirements 20

3.5.2.4 Auditing requirements – cold storage disinfestation centres 21

3.5.3 Post treatment security - cold storage disinfestation 21
3.5.4 Post treatment transportation of product to export loading point 21
3.5.5 Phytosanitary certificate endorsements 21
3.6 Non host status ***23***
3.6.1 Registration requirements 23
3.6.2 Treatment details and treatment centre responsibilities 23
3.6.3 Post treatment security - non-host status commodities 23
3.6.4 Post treatment transportation of product to export loading point 23
3.6.5 Phytosanitary certificate endorsement 24
3.7 Heat Treatments ***25***
3.8 Nil ***26***
3.9 Nil ***27***
3.10 Field control programmes ***28***
3.10.1 Grower responsibilities 28
3.10.2 Packinghouse responsibilities 29
3.10.3 Treatment centre responsibilities 29
3.10.4 Exporter responsibilities 29
3.10.5 Phytosanitary certificate endorsements 30
3.11 Winter Window – Field control systems Approach ***31***
3.11.1 Registration requirements 31
3.11.2 Treatment details and treatment centre responsibilities 32
3.11.3 Product security 32
3.11.4 Transporting and loading into export containers 32
3.11.5 Phytosanitary Certification 32
Attachment 1 to Section 3 – Summary of requirements for access of fruit fly host commodities into New Zealand from Australia ***35***
SECTION 4. MANAGEMENT RESPONSIBILITIES **1**
4.1 AQIS Canberra Office ***1***
4.2 State Departments of Agriculture (or equivalents) ***1***
4.3 AQIS State Offices ***2***
4.3.1 Registration Requirements 2
4.3.2. Sampling Requirements 3
4.3.2.1 Consignment Line Samples 4
4.3.2.2 Grower Line Samples 4
4.3.3 AQIS Inspection Procedures 4
4.3.4 Rejection Procedures 5
4.3.5 Split Consignment Inspections 6
4.4 Untreated Produce Being Forwarded from Country Areas ***6***
4.5 AQIS Auditing Requirements ***7***
4.5.1 AQIS BQA/IHS Audit Requirements 7
4.5.1.1 Grower/Audit Frequency: 7
4.5.1.2 Grower Audits - Certification Assurance Systems 8
4.5.1.3 Audit Requirements/Growers - Suspension Criteria 8
4.5.1.4 Grower Audits - Non Compliance 8
4.6 Audit Requirements/Crop Monitors ***9***
4.6.1 Crop Monitor Audits/Non Compliance 10
4.7 Audit Requirements/Packinghouses ***10***
4.7.1 Packinghouse Audits/Non Compliance 10
4.8 Audit Requirements - Treatment Centres ***11***
4.8.1 Treatment Centre Audits/Non Compliance 12
4.9 Audit Requirements - Exporters ***12***
4.9.1 Exporter Delegate Audits 12
4.9.2 Exporter/Exporter Delegate - Non Compliance 12
4.9.3 Audits after Product Rejections by AQIS 13
Attachment 1 to Section 4 – AQIS Plant Contact List ***14***

SECTION 5. GROWER RESPONSIBILITIES **1**
5.1 Registration ***1***
5.2 Responsibilities ***1***
5.3 Grower Audits ***2***
5.3.1 Grower Suspensions 2
5.3.2 Grower Audits - Non Compliance 3
5.3.3 Audit Requirements/Crop Monitors 4
5.3.4 Crop Monitor Audits/Non Compliance 4
SECTION 6. PACKINGHOUSE RESPONSIBILITIES **1**
6.1 Grower Registration - Commodity Specific ***1***
6.2 Packinghouse Responsibilities - Commodity Specific ***2***
6.3 Inspection Requirements ***3***
6.3.1 Documentation 3

6.4 Security and Supervision Responsibilities *3*
6.5 Packinghouse Audits *3*
6.5.1 Application for Registration 4
6.5.2 Continued Registration 4
6.6 Suspension of Packinghouse Registration *4*
SECTION 7. COMPLIANCE AGREEMENTS - PACKINGHOUSE RESPONSIBILITIES **1**
7.1 General Requirements *1*
7.1.1 Auditing for New Zealand Requirements 1
7.1.2 CA - New Zealand Inspection Requirements 2
7.2 Documentation *3*
7.3 Post treatment Security *4*
SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES 1
8.1 Registration *1*
8.2 Process Controls *1*
8.3 BQA Treatments - AQIS Supervision *1*
8.3.1 Fumigation Centres 1
8.3.2 Cold Storage Centres 2
8.3.3 Dimethoate Treatments 2
8.3.3.1 Waxed produce 2
8.3.3.2 AQIS requirements 2
8.4 AQIS Audits of Treatment Centres *3*
SECTION 9. EXPORTER RESPONSIBILITIES **1**
9.1 Registration Requirements *1*
9.2 Exporter Responsibilities *1*
9.3 Exporter Inspection *1*
9.4 Split Consignment Inspections *2*
9.5 Untreated Produce being forwarded from Country Areas *3*
9.6 Delegation of Inspection *3*
9.7 Documentation *3*
9.8 Procedures for Exporter Rejected Produce *4*
9.9 Post treatment Security *4*
9.10 Security of Produce - Exporter/Freight Forwarder Premises *5*
9.11 Audits - Exporters *5*
9.12 Audits -Exporter's Delegate *5*
9.13 Exporter/Exporter Delegate - Non Compliance *6*
SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES **1**
10.1 Fruit Fly Area Freedom - Management Requirements *1*
10.1.1 Area Freedom - Fruit Flies 1
10.1.2 Validation of Area Freedom 1
10.1.3 Outbreak 1
10.2 Trapping *2*

SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS **1**
11.1 Redback Spiders - Lactrodectus hasselti *1*
11.2 Treatment details *1*
11.3 Traceability *1*
11.4 Additional precautionary measures *2*

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES **1**

AVOCADO **1**
BANANA **7**
CAPSICUM **11**
CITRUS **20**
CUCUMBER **27**
GRAPE **36**
MANGO **45**
MELON **48**
PAPAYA **57**
PINEAPPLE **60**
POMEGRANATE **65**
STRAWBERRY **68**
TOMATO **72**
WATERMELON **79**
ZUCCHINI & SCALLOPINI **87**

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY **1**

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT **1**
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT **9**
QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA **16**

APPENDIX 3 FORMS **1**

3.1 APPLICATION FOR GROWER REGISTRATION **1**
3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION **2**
3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION **3**
3.4 INSPECTION RECORD **5**
3.5 FUMIGATION RECORD **6**
3.6 COLD DISINFESTATION RECORD **8**
3.7 WITHDRAWAL NOTICE **9**
3.8 SUSPENSION NOTICE **10**
3.9 DECLARATION OF DIMETHOATE TREATMENT **11**
3.10 TOMATO VARIETY DECLARATION **12**
3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES **13**
3.12 CONTAINER HYGIENE REPORT **15**
3.13 STATUTORY DECLARATION **16**
3.14 AVOCADO GROWER DECLARATION **17**
3.15 CUCURBIT GROWER DECLARATION **18**

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AMENDMENT RECORD

Amendments to this Manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

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GLOSSARY OF TERMS

AFFA	Agriculture, Fisheries and Forests of Australia
ANVAS	Avocado Nursery Voluntary Accreditation Scheme
APPB	Animal and Plant Programs Branch (AQIS Canberra)
AQIS	Australian Quarantine and Inspection Service
BQA	Bilateral Quarantine Arrangement
CA	Certification Assurance
EC (FF+V) O's	Export Control (Fresh Fruit and Vegetable) Orders
EDB	Ethylene Dibromide
IHS	Import Health Standards (New Zealand)
ISO	International Standards Organisation
MAF	Ministry of Agriculture and Forestry (New Zealand)
MAP	Maximum Allowable Prevalence
MB	Methyl Bromide
QC	Quality Control
SBV	Sun Blotch Viroid (Avocado)
SI(E)	Senior Inspector (Exports)

DEFINITIONS

AQIS Inspection Lines	An inspection line is any number of packages from one packer/exporter of the same BQA commodity presented for inspection at one time. Lines are rejected/accepted for export based on this inspection. This includes lines presented for inspection that will be subsequently split into separate consignments for export to several destinations in New Zealand.
Commodity	All species/varieties of produce which come under the one genus of plants and are treated by the same disinfestation treatment, are to be considered as one commodity. (i.e. rockmelons and zucchini are one commodity under the cucurbit group of plants - mandarins and lemons are one commodity under citrus).
Defect	Any unit of produce that is infested with critical and/or quarantine pests.
End Point Inspection	Product inspection carried out on an individual grower line basis following disinfestation treatments being undertaken. Lines are rejected/accepted for AQIS inspection based on the results.
Grower Line Consignments	A consignment consisting of only one BQA crop and from one grower.
Homogeneous	An identifiable line of produce which has been produced in accordance with the directions in this Manual resulting in uniformity of treatment.
In - Line Inspection	A process where a packinghouse under AQIS Approved Certification Assurance (CA) Arrangements, has defined a sampling and inspection method, that meets the appropriate sampling plan required in this Manual, over a period of time during the packing process.
Interim Approval	Approval for a disinfestation treatment system which has been accepted in principal by MAF but not ratified as an approved treatment system pending additional research being concluded and accepted by MAF. Any commodity which has an "interim approved" arrangement, will if live fruit fly is found during on-arrival inspection in New Zealand, be suspended from export to New Zealand immediately.
Line	A group of produce that is homogeneous.
Mixed Line Consignments	A consignment, covered by a single phytosanitary certificate for one commodity but from more than one grower.

Monitoring	The actions undertaken to detect the presence of fruit fly or other Risk Group 2 pest/contaminant in the orchard area and/or to meet New Zealand's fruit fly area freedom specifications.
Pathway	A documented series of activities that, when carried out according to approved procedures, form a discrete and traceable system, from the grower to export loading point.
Phytosanitary Certificate	The certificate signed by an AQIS Inspector in accordance with the International Plant Protection Convention verifying that produce has been produced in accordance with the Australia - New Zealand BQA and the directions of this Manual and appropriately endorsed.
Risk Group 3 Pest	Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic effects on their production and/or environment (some importing countries prohibit the entryof the host commodity). An offical surveillance system is required for such pests in New Zealand.
Risk Group 2 Pest	Risk Group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.
Risk Group 1 Pest	Risk Group 1 pests are those regulated pests which on introduction into New Zealand could cause unaceptable economic impacts on the production of a commodity/commodities and/or the environment.
Secure Package	Any approved method that will minimise the risk of cross contamination, re-infestation or substitution of produce destined for New Zealand after it has been inspected and/or treated, to ensure it meets the New Zealand entry requirements.
Trade Samples	Are fruits which are being forwarded for market appraisal, packaging methods or other types of research work being investigated on a commercial scale by importers/exporters involved directly in the Australia - New Zealand trade.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a cluster).
Winter window	The winter window is effectively a treatment (Appendix 11 to the BQA) which allows access for host commodities of *Bactrocera cucumis* into New Zealand between 1 May and 30 September in any year.

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INTRODUCTION

SECTION 1. BACKGROUND

1.1 Bilateral Quarantine Arrangement (BQA) - Incorporating New Zealand Import Health Standard Requirements

The BQA is a formal agreement between the Australian Quarantine and Inspection Service (AQIS) and the New Zealand Ministry of Agriculture and Forestries (MAF), to ensure New Zealand's pre-export requirements are documented. This Manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The previous BQA had 15 appendices which related to each commodity being exported. For example Appendix 2 related to pome fruits and included responsibilities that must be followed by AQIS before certifying apples or pears for export to New Zealand.

AQIS/MAF have amended the BQA to include a series of appendices that describe the requirements for a particular treatment for fruit fly host material. This new BQA structure incorporates recent developments in relation to the documentation of New Zealand import health standards (IHS) on a commodity by commodity basis.

The major change which occurs between the "old" and the "new" import systems is that under the "old" BQA, MAF imposed a tolerance of 5 live eggs/larvae of fruit flies in one million units of produce. To meet that fruit fly tolerance, operational systems had to include additional grower and packer responsibilities to ensure that a very low level of infested material would be presented to AQIS for export inspection. With the incorporation of the new IHS and BQA systems, New Zealand have reviewed the tolerance levels for fruit flies and now consider disinfestation treatments that provide 32 insect survivors in one million treated insects (Probit 9 treatments) to be adequate security for their import Standards.

All approved fruit fly disinfestation treatments, as listed in this Manual, meet the required New Zealand disinfestation standards. Any new disinfestation treatments that industry may require to be investigated (particularly heat treatments), will need to meet the efficacy requirements of the New Zealand IHS systems.

The resultant change in emphasis by MAF means that the previous stringent grower and packer requirements are no longer mandatory for all treatment pathways* where an approved disinfestation treatment is applied. However, packinghouses who have some responsibilities delegated to them through treatments and exporter inspection arrangements, will still have responsibilities to fulfil to ensure New Zealand quarantine requirements are met. There will be much more emphasis placed on treatment centres, treatment centre operators, post treatment security and exporter requirements than was previously required.

*NOTE: growers of some commodities will still be required to undertake specific responsibilities where there are pests which are categorised as Quarantine Risk Group 2 and need field control programs as a treatment management option for this category of pest. For further information see Grower Responsibilities in Section 5 of this Manual.

Specific Changes to the BQA

Under the new BQA/IHS framework, AQIS/MAF have changed the emphasis of the appendices from commodities to treatment pathways. This means that for many commodities there are no longer mandatory requirements to document and undertake pre-treatment activities.

Procedures which may no longer be compulsory under the new BQA/IHS framework include;

. grower registration - (monitoring and spray diaries - unless specific controls are required for defined Quarantine Risk Group 2 pests).
. packer registration - (unless packer is packing defined Quarantine Risk Group 2 pest commodities, or is undertaking approved treatments of produce, or inspecting produce under exporter delegation).

NOTE: grower and/or packer registration may still be required where traceback to the "treatment" includes pest free production areas or non-host status treatment with special requirements (e.g. designated non-host status by variety).

The new BQA/IHS and the requirements of this Manual concentrate on the documented responsibilities of treatment of produce through to the export of the commodities, including security of the system once treatment has been undertaken and inspection procedures which must be undertaken to ensure accurate phytosanitary certification and consignment homogeneity.

For some fruit fly host commodities it will only be necessary to have an auditable system from the treatment operator and/or treatment facility, including post-treatment security procedures until the product is loaded for export shipping, which will safeguard against possible product reinfestation or substitution.

However, for other commodities where in-field controls are associated with the commodity being packed, an auditable system must be in place from grower through to export loading—as was the case under the "old" BQA systems.

1.2 Scope of the Manual

This Operational Manual is designed to ensure;

. only approved fruit fly host commodities are exported to New Zealand,
. homogeneity of fruit fly host produce consignments,
. approved treatments for fruit fly host produce are used,
. required levels and intensity of inspection of fruit fly host produce are maintained,
. security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce,
. records traceback to grower/packer/treatment centre (as appropriate),
. accurate phytosanitary certification is made in accordance with New Zealand requirements.

NOTE: all systems will be subject to random audits by the Canberra Office and all systems may be audited by New Zealand MAF at frequent intervals. The purpose of such audits will be to establish that the terms and conditions of the BQA/IHS are being met via the procedures agreed to and documented in this Manual, and will include measurement of pathway compliance from growers (where required) through to final export container loading and all associated documentation.

It is recommended that AQIS State Offices and State Departments of Agriculture (or equivalents), should also conduct management audits of the systems to ensure the State responsibilities are being adequately performed and recorded.

This Manual gives instructions for audit procedures and maintenance of records that will be the responsibility of AQIS State Offices, and where applicable State Departments of Agriculture or their equivalents (where these States still retain independent export inspection regimes), to implement and to take required corrective actions when non-conformities are identified.

The commodities and approved treatments that apply to fruit fly host produce are as follows;

	Commodity	**Treatments**	**Special Conditions**
.	Tomato	Dimethoate	Grower Registration
		Area Freedom	Nil
.	Cucurbits	Dimethoate - Approved treatment	Nil
		Dimethoate & in-field controls	Grower Registration
		Fumigation & in-field controls	Grower Registration
		Area Freedom	Nil
		Winter window	Grower Registration
.	Capsicum	Dimethoate	Grower Registration
		Area Freedom	Nil
.	Grape	Cold Storage	Grower Registration
		Area Freedom	Grower Registration
.	Pineapple	Non-Host status	Nil
.	Strawberry	Fumigation	Nil
		Area Freedom	Nil
.	Avocado	Cold Storage	Grower Registration
		Area Freedom	Grower Registration
.	Citrus	Cold Storage	QLD - Grower Reg.
		Area Freedom	QLD - Grower Reg.
.	Pear	Cold Storage	Nil
		Area Freedom	Nil

NOTE: all cartons of produce intended for export to New Zealand, whether grower registration is required or not, must be marked with some form of grower and packinghouse identification so that traceback can be undertaken to grower's properties.

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SECTION 2. PEST CATEGORIES

MAF have made some alterations to the previous pest lists that have been used in conjunction with BQA products. Some of these changes include amendments to pest classifications or categories. Industry and AQIS inspection staff should compare the new and old pest lists for each commodity (listed at Appendix 1 to this Manual) to become familiar with the new listings. Pest Lists are commodity specific and include reference to pests which are regarded as non-quarantine pests to enable additional direction to be given to inspection requirements.

Note: during any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Any pest detected which is not presently included in the Pest Lists **must** be reported to the Canberra Office immediately so that advice and categorisation can be made in conjunction with MAF New Zealand. The consignment must be held until a categorisation of the pest is made.

2.1 Pest Category Classifications

2.1.1 BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS

Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which upon entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or would have significant economic effects on their production and/or environment (some importing countries prohibit the entry of the host commodity). An offical surveillance system is required for such pests in New Zealand.

Hosts of Risk Group 3 pests require approved disinfestation treatments to be undertaken in Australia and the establishment of operational systems which document the procedures which will be undertaken to ensure AQIS phytosanitary certification is meaningful and auditable by MAF.

The action taken by MAF should Risk Group 3 pests be detected on arrival in New Zealand will be to reship or destroy the offending consignment and to immediately suspend the export treatment pathway. For example, if an offending consignment is associated with dimethoate treatment, all dimethoate treatments would be suspended (not just the offending commodity), until an AQIS audit/investigation was completed and the results accepted by New Zealand.

The same rule applies to area freedom or non-host status treatment pathways.

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS

Risk Group 2 pests are those regulated pests which upon introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.

These pests/contaminants will require an Additional Declaration for Risk Group 2 pests on the phytosanitary certificate. The Additional Declaration will certify that some form of management

practice (eg. a pest control program in the field), has been carried out to ensure the consignment is free from the pest/contaminant of concern.

The action taken by MAF on interception of live Risk Group 2 pests will be to reship or destroy the offending consignment and immediately advise AQIS of the non-conformance. In some instances the consignment may be ordered for treatment (if an effective treatment is available). There will be no suspension of trade invoked for Risk Group 2 pests although AQIS will usually conduct a follow up audit to determine the cause of the system failure and to implement corrective action where possible.

Please see the individual commodity pest lists at Appendix 1 to this Manual for details of those commodities for which additional declarations are required for Risk Group 2 pests/diseases.

2.1.3 International Phytosanitary Certificate (IPC) Pests - Risk Group 1 - PESTS

Risk Group 1 pests are those regulated pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

The action taken by MAF on interception of live Risk Group 1 pests will be to allow the consignment to be treated if an approved treatment is available, or alternatively, the consignment will be reshipped or destroyed.

Should Risk Group 1 pests be detected during exporter/exporter delegate inspections, the consignment must be rejected and subject to corrective action before being presented for AQIS inspection.

In accordance with International Plant Protection Convention (IPPC) rules for the issuance of phytosanitary certificates, should any live Risk Group 1 pests be detected during AQIS inspection the consignment must be rejected and subject to corrective action (reprocessing, withdrawal of offending grower etc.), before being resubmitted for further inspection and certification.

2.2 Maximum Pest Levels

The inspection tolerances in Table 1 below ensure a 95% confidence that the given Maximum Allowable Pests (MAP) will not be exceeded for any category.

A selected sample size must be nominated by the exporter or exporter delegate prior to any inspection being undertaken. Once a sample number has been selected it cannot be varied and must then be used for all inspections covering that line/consignment. That is, the AQIS and MAF on-arrival inspections will all be conducted at the nominated sample size rate.

TABLE 1
INSPECTION TOLERANCE TABLE
SAMPLE SIZES - PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weedseeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 - 2000	520	0	≤ 7	0
2001 - 3000	550	0	≤ 7	0
3001 - 4000	560	0	≤ 7	0
4001 - 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

Pests listed as Non-regulated (non-quarantine) pests at Appendix 1 of this Manual have an unlimited tolerance during inspection. These pests are regarded as non-quarantine pests between Australia and New Zealand.

Note: during any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF. The offending consignment must be held until a categorisation is made.

2.3 Contaminants

Consignments contaminated with soil, or other potential carriers of regulated pests (eg. leaf litter) will not be permitted entry if the level of contamination is above the acceptable tolerance level. MAF Biosecurity Authority (Plants) Standard 152.02 – section 7.4 gives the following tolerances for soil and foliage contamination upon inspection of consignment lines in New Zealand:

- Consignment lines contaminated with soil in excess of 25g per 600 units sampled shall either be washed free of soil prior to release, reshipped or destroyed at the importer's option and expense.

- Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped or destroyed at the importer's option and expense.

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SECTION 3. NEW ZEALAND - IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS

3.1 Country freedom from fruit flies (based on NASS Standard 158.03.07)

FRUIT FLY PEST FREE AREAS IS KNOWN AS APPENDIX 1 TO THE BQA/IHS

Appendix 1 to the BQA/IHS refers to fruit flies that are considered to be exotic to Australia and which are not established here. e.g. *Bactrocera cucurbitae* (melon fly).

Through the Australian surveillance and monitoring program, managed by the National Plant Protection Office within AFFA (and consisting of exotic fruit fly trapping and monitoring regimes which are conducted at all international air and sea ports), Australia can claim and New Zealand will accept whole of Australia freedom from exotic fruit flies. There are no specific requirements or endorsements to the phytosanitary certificate required for this Appendix to the BQA.

The air and sea ports that are included in the trapping and monitoring regimes are listed below;

Northern Territory

Darwin	Gove	Groote

Queensland

Brisbane	Bundaberg	Cairns
Gladstone	Karumba	Mackay
Mourilyan Harbour	Thursday Island	Townsville
Weipa		

New South Wales

Coffs Harbour	Newcastle	Sydney
Wollongong	Yamba	

Victoria

Geelong	Melbourne/Westerport	Portland

South Australia

Adelaide	Ceduna	Port Augusta
Port Lincoln	Port Pirie	Whyalla

Western Australia

Albany	Broome	Bunbury
Carnarvon	Dampier	Derby
Esperance	Geraldton	Karratha
Perth/Freemantle	Port Hedland	Wyndham

Tasmania

Devonport/Burnie	Hobart	Launceston

3.2 Area freedom districts within Australia (based on NASS standard 158.03.06)

FRUIT FLY AREA FREEDOM IS KNOWN AS APPENDIX 2 TO THE BQA/IHS

The fruit flies that are referred to at Appendix 2 to the BQA are those fruit flies which are endemic to Australia, but for which various districts have, through trapping and monitoring programs, been able to establish area freedom from those flies. eg *Bactrocera tryoni*.

Area freedom from fruit flies is considered an approved treatment for those areas where approved trapping regimes are in place in accordance with the minimum Standards covered by the Australian Code of Practice for the Management and Control of Queensland Fruit Fly and where equivalent permanent trapping regimes are in place for Mediterranean fruit fly and Oriental species of fruit fly as stipulated in the New Zealand NASS Standard 158.03.06 and NASS Standard 158.03.07.

NOTE: should a fruit fly of any species (either alive or dead) be found during AQIS or Industry inspections in Australia, AQIS will inform the State Department of Agriculture responsible for the region supplying that fruit of the detection—AQIS will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.
Should a fruit fly of any species (either alive or dead) be found during New Zealand MAF on-arrival inspections, it will mean the suspension of all area freedom certification from all districts of Australia until an AQIS audit can be undertaken to determine the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on the results of the AQIS audit.

MAF have approved (under specific management criteria - New Zealand NASS Standard 158.03.06) a 15km radius suspension zone for a period of one generation plus 28 days (from when the last fly was caught) to be implemented around fruit fly outbreak sites in the Riverland (including the Riverland extension area and Mypolonga), Sunraysia, Tasmania and Riverina. A fruit fly outbreak will occur where either 2 male flies are detected within 400 metres within 14 days, 1 female fly is detected, or one or more larvae are detected.

Should, as a result of detection surveys, there be a situation where 2 outbreak sites are found between 1 - 3 kms apart, a 30 kms outbreak zone will be applied from a mid-distance between the outbreak sites. Where detections reveal two outbreak sites in excess of 3 kms apart, two 15 kms radii circles will be applied to each outbreak site.

NOTE: should a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

State Departments of Agriculture (or their equivalents) must report all fruit fly finds (including single fly detections) in the fruit fly area freedom zones to AQIS Canberra Office within 2 days of detection and identification. This information shall be passed onto MAF New Zealand at the earliest opportunity thereafter.

3.2.1 Approved area freedom districts

The following districts are recognised as being area free of all species of fruit fly as determined by trapping surveys and monitoring data forwarded by AQIS to MAF, and accepted by MAF as meeting their requirements under NASS Standards 158.03.06.

3.2.1.1 Riverina - MIA

This area covers the horticulture growing districts along the Murrumbidgee River (as well as the township of Hillston on the Lachlan River), and includes (but is not excluded to) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrandera and Darlington Point and the towns which are located between the above nominated towns.

Area (b) is the Hillston District.

Area (c) is the Menindee District.

3.2.1.2 Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and other areas around and between these towns.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and other areas between these towns.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and other areas between these towns.

3.2.1.3 Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri, Barmera, Waikerie and other areas between these towns.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, and includes the towns in between and the Shire of Mildura.

Area (i) the Mypolonga township surrounds.

3.2.1.4 Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

NOTE: in the event that "Area Freedom" is suspended within any of the above defined regions at any time, packinghouses who intend to pack both "area free fruits" and "suspension zone fruits" must develop written procedures to show how fruits from each area will be identified, segregated, processed, stored and documented. Fruits from "area free zones" and those needing physical or chemical treatments must be shipped as separate consignments and cannot be co-joined.

3.2.2 Registration requirements

TABLE 2
APPENDIX 2 TO THE BQA/IHS
AREA FREEDOM FROM FRUIT FLIES
COMMODITY REGISTRATION REQUIREMENTS

Commodity/ Requirements	Grower Registration	Grower Monitoring & Spray Diaries	Packinghouse Registration for NZ	Treatment Registration	Exporter Registration
Avocado Grapes	Yes	Yes	Yes	Approved state surveys	Yes
All other commodities	Not required	Not required	Yes	Approved state surveys	Yes

Grower

- Growers of avacadoes must be registered with AQIS for the purpose of maintaining field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
- Growers of grapes must be registered for the purpose of maintaining field controls for the Risk Group 2 pest Conogethes punctiferales. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus.

- **Packinghouse**

- All products - packinghouses that are packing commodities for export to New Zealand under area freedom must be registered with AQIS because area freedom is considered to be a treatment.

While grower registration may not be mandatory, all packinghouses must provide a list of grower's names, addresses and allocated grower numbers for all produce that is being packed for the New Zealand market.

NOTE: in the event that fruit fly outbreak suspension zones are implemented within fruit fly area freedom districts, packinghouses must provide a list of growers who are in the declared quarantine suspension zone, and a list of growers who remain in the area freedom districts surrounding a suspension zone.

Treatment centre

There are no treatment centres associated with the area freedom pathway. Approved state government surveys are deemed to be the treatment.

Exporter

- All products - exporters of all commodities under area freedom must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 9 of this manual. Export documentation for these commodities must refer to Appendix 2 to the BQA.

All consignments must be directly traceable to the specific fruit fly area freedom district from which the produce was sourced. AQIS requires that grower numbers form part of the trade description requirements, and they will form a traceback mechanism should such be required.

3.2.3 Post treatment security - area freedom

All product being moved from an area freedom from fruit flies district, which is to be loaded for export outside that district, must be fully secured at all times.

Approved security measures for transporting of produce will include either;

. fully shrinkwrapping each pallet of produce (including the surface area between the bottom row of cartons and the actual pallet),
. fully enclosing each pallet with shademesh cloth with a maximum aperture of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),
. loading direct into panotech vans with units sealed by AQIS officers.

3.2.4 Post treatment transportation of product to export loading points

All consignments shipped out of Area Freedom Districts will be covered by either an AQIS EX 186 Transfer Certificate or EX 28 Notice of Intention to Export Certificate issued by the despatching AQIS office. Each consignment must be inspected on arrival in the receiving district by AQIS officers in that region to verify the security of the consignment/s.

Should inspecting officers find that the security of the consignment/s have been breached during transporting, the consignments must be rejected for area freedom certification. However, the rejected produce may be allowed disinfestation treatments, as directed in this Manual, as corrective action should the exporter choose this option.

3.2.5 Phytosanitary certification endorsements

General endorsement - 1

"The produce (name) in this consignment has been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The produce (name) in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific Endorsement - Avocado (refer to section 3.5 of this manual)

“The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid”.

Specific Endorsements - Tablegrapes (refer to section 3.5 and 11 of this manual)

“The grapes in this consignment have undergone approprite pest control activities that are effective against *Latrodectus hasselti* and *Conogethes punctiferalis*”.

"The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*":

NOTE: as an alternative to using the specific endorsement for *Latrodectus hasselti* (red back spider) above, the treatment may be placed in the treatment section of the phytosanitary certificate.

Specific Endorsement - Citrus fruits (refer to section 3.5 of this manual)

“The citrus (name) in this consignment have undergone appropriate pest control activities that are effective against *Guignardia citricarpa*”.

Specific Endorsement - Cucurbits, tomatoes & capsicums (refer to section 3.4 of this manual)

"The product (name) in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF".

3.3 Methyl bromide fumigation

METHYL BROMIDE FUMIGATION IS KNOWN AS APPENDIX 3 TO THE BQA/IHS

Strawberries and **watermelons** are the only commodities permitted to be exported to New Zealand under this treatment. If watermelons are grown for export to New Zealand under this treatment the additional conditions in section 3.10 of this manual must be met.

3.3.1 Registration requirements

Grower

- Strawberries - growers are not required to be registered for strawberries that are grown for export under this treatment.
- Watermelons - growers of watermelons must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the watermelons. Refer to section 3.10 of this manual for field control requirements.

Packinghouse

- Strawberries - packinghouses are not specifically required to be registered for strawberries under this treatment.
- Watermelons - packinghouses that are packing watermelons must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises.

Treatment centre

- Strawberries and watermelons - fumigation treatment centres must be registered with AQIS for treatment of New Zealand BQA produce. Fumigations must be performed by persons that have been licensed for this purpose. Treatment details and fumigator responsibilities are detailed in section 3.3.2 and section 8 of this manual.

Exporter

- Strawberries - exporters of strawberries under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed in section 9 of this manual. Export documentation for strawberries must refer to Appendix 3 to the BQA.
- Watermelons - exporters of watermelons under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed in section 9 of this manual. Export documentation for watermelons must refer to Appendix 3 to the BQA.

☞ Strawberries and watermelons cannot be combined as one consignment. This is because both come from distinctly different pathways (ie, strawberries only require fumigation while watermelons require both fumigation and in-field controls).

NOTE: should live fruit fly be found during AQIS or Exporter inspections following treatment, the fumigation centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the methyl bromide treatment pathway will be suspended immediately for all Australian products until an AQIS audit can be undertaken to determine the reasons for such failure, and MAF accept these findings.

3.3.2 Treatment details and fumigator responsibilities

All fumigations must be performed with the amount of product space equal to less than 50% of total air space within the chamber or tent. Fumigation treatment requirements are as detailed in Table 4 below.

TABLE 4
METHYL BROMIDE FUMIGATION
TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21 - 26°C and above	32g/m^3	Watermelon - 4 hours
15°C and above	48g/m^3	Strawberry - 3 hours

In addition to the normal AQIS registration requirements pertaining to fumigation centres, the following additional requirements must be in place before registration for the New Zealand program is permitted.

All BQA/IHS produce required to be fumigated must be managed in accordance with the following process controls. Fumigation treatment centres must be able to demonstrate at all times that the following requirements are being met:

1. Incoming product identification.
2. Segregation from other produce and clearly marked “New Zealand”
3. The treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment. ie Treatment batch numbers relating to incoming consignments or equivalent recording systems will be required.
4. Documented treatment records
5. How measuring equipment is calibrated, and how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.
9. If required, maintenance of inspection facilities on the premises.

In accordance with the above requirements, fumigation treatment facilities must develop a set of procedures that clearly define the responsibilities and work duties of all staff involved in the fumigation of watermelons or strawberries.

It is recommended that fumigation establishments write procedures for each of the above requirements, detailing who is responsible for the activity (it can be more than one person as long as all persons know their duties in each category), when the activity is done, what records are made and where these records will be filed.

With regard to Item 3 above, it is recommended that individual procedures accompanied by work instructions be written to define the processes and controls on the processes. The following criteria should be considered:

- within process control, mention must be made as to how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent, and
    - define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.
- how many fruits will be sampled to measure lowest flesh temperature of product?
- if tent fumigation is being performed, by whom and when is the tent checked for holes/tears?
- who, how and when is temperature measuring equipment calibrated? How is this recorded?
- where are in-process gas monitoring lines located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?
- who calculates and who checks required fumigation dosage rate once temperature and volume are calculated?
- how is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?
- who is responsible for checking that the correct amount of fumigant is entered into the chamber/tent?
- what procedures are applied to ensure no leaks from the chamber or tent are evident?
- what period of time after initial fumigant is released into the chamber/tent will verification readings be made, and using what type of equipment?
- calibration of gas measuring equipment is undertaken how frequently and who does this? Calibration details are recorded where?
- at completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?
- who has the authority to sign off the treatment certificates to enable release of produce?
- how is treated product identified as being treated?

All processes undertaken by fumigation treatment centres for New Zealand trade should have written procedures, and the system should be such that it can always stand up to audits.

All fumigations which are undertaken using flexible tent capacities will be subject to AQIS supervision and monitoring procedures to ensure that the requirements as directed above are being undertaken effectively. Fumigations performed in fixed capacity chambers or tents will be monitored by AQIS at frequent intervals during the fumigation season.

It is recommended that treatment centres, when making application for registration for the New Zealand trade, should submit a process control procedures manual for AQIS assessment so that registration and process controls can be assessed and approved simultaneously.

NOTE: although growers and packinghouses associated with strawberry production and packaging do not need to be formally registered for the New Zealand export program, each package of fumigation treated product must be clearly marked with some form of grower and packinghouse identification, along with the exporter's name and address.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on the Transfer Certificate (EX 186) or Notice of Intention to Export/Export Permit (EX 28) and signed off by an AQIS approved officer.

NOTE: Senior Inspectors (Exports) may approve variations to the above documentation requirements to suit a particular State's operating requirements, and the use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is to be used, it is recommended that audits of such systems be undertaken frequently enough to enable confidence within the systems.

3.3.3 Post treatment security - methyl bromide fumigation

Immediately following labelling of packaging, produce must be secured by either:

- shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet), or
- shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom, or
- coolstoring unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product, or
- coolstoring protected in secure packages at any temperature.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the State of operation for assessment and approval.

3.3.4 Post treatment transportation of product to export loading point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on treatment centre premises.
- supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.
- documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.
- the nominated person can be either the exporter's delegate or the operator of the treatment establishment.
- the exporter or the exporter's delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.
- the exporter or the exporter's delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,
    - if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce or the untreated produce must be properly secured.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.3.5 Phytosanitary certificate endorsements

General endorsement - 1

Strawberries

"The strawberries in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

Watermelons

"The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The produce (name) in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific endorsement - watermelons

"The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

3.4. Dimethoate dip/spray

DIMETHOATE DIPPING/SPRAYING IS KNOWN AS APPENDIX 4 TO THE BQA/IHS

Tomatoes, **capsicums**, **zucchinis**, **rockmelons**, **honeydew melons**, **cucumbers** and **scallopinis** are the only commodities permitted to be exported to New Zealand under this treatment. In addition, when capsicums, honeydew melons, tomatoes, cucumbers and scallopinis are grown for export to New Zealand under this treatment the conditions in section 3.10 of this manual must be met.

3.4.1 Registration requirements

Grower

- Tomatoes - growers of tomatoes must be registered with AQIS for two reasons; 1) because only certain varieties of tomatoes are permitted to be exported to New Zealand under this treatment **(the five permitted varieties of tomatoes are; Floradade, Sunny, Duke, Hayslip and Tristar)**; and, 2) for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the tomatoes [please refer to section 3.10 of this manual]. Tomato growers must include in their registration application a map showing all blocks in which permitted tomato varieties are grown. Reference to individual blocks on this map will be made on the tomato variety declaration, at appendix 3.10 of this manual, for each consignment of tomatoes delivered to registered packinghouses.
- Capsicums - growers of capsicums must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the capsicums. Please refer to section 3.10 of this manual.
- Zucchinis - growers are not required to be registered for zucchinis that are grown for export under this treatment.
- Rockmelons - growers are not required to be registered for rockmelons that are grown for export under this treatment.
- Honeydew melons - growers of honeydew melons must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the melons. Refer to section 3.10 of this manual for field control requirements.
- Cucumbers - growers of cucumbers must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the cucumbers. Refer to section 3.10 of this manual for field control requirements.
- Scallopinis - growers of scallopinis must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the scallopinis. Refer to section 3.10 of this manual for field control requirements.

Packinghouse

- Tomatoes - packinghouses that are packing tomatoes must be registered with AQIS for two reasons; 1) because only certain varieties of tomatoes are permitted to be exported to New Zealand under this treatment; and,2) their responsibilities for maintaining security of the product whilst it is on the packing premises. Tomato packinghouses are not permitted to pack/treat tomatoes for New Zealand unless they have grower declaration forms showing that the tomatoes are one of the five varieties permitted to undergo dimethoate treatment for export to New Zealand. To help reduce the possibility of non-approved tomato varieties being inadvertently included in consignments destined for New Zealand, the approved tomato variety **must** be shown (eg. stamped) on all export tomato cartons. It is recommended that differentiation of export and domestic cartons also be implemented. This already occurs in many instances, for example, different trading names/colours are used for domestic and export cartons.

- Capsicums - packinghouses that are packing capsicums for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Refer to section 3.10 of this manual for requirements.
- Zucchinis - Packinghouses are not specifically required to be registered for zucchinis that are being packed for export to New Zealand under this treatment.
- Rockmelons - packinghouses are not specifically required to be registered for rockmelons that are being packed for export to New Zealand under this treatment.
- Honeydew melons - packinghouses that are packing honeydew melons for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Refer to section 3.10 of this manual for requirements.
- Cucumbers - packinghouses that are packing cucumbers for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Refer to section 3.10 of this manual for requirements.
- Scallopinis - packinghouses that are packing scallopinis for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Refer to section 3.10 of this manual for requirements.

Treatment centre

- All products - dimethoate dip/spray treatment centres must be registered with AQIS for treatment of New Zealand BQA produce. Treatment details and treatment centre responsibilities are detailed in section 3.4.2 and section 8 of this manual.

Exporter

- Cucurbits - exporters of these commodities under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 9 of this manual. Export documentation for these commodities must refer to Appendix 4 to the BQA.
- Capsicums and tomatoes- exporters of these commodities under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 9 of this manual. Export documentation for these commodities must refer to both Appendix 4 and Appendix 10 to the BQA.

☞ Commodities can only be combined to make up a single consignment if they have come from the same treatment pathway. That is, zucchinis and rockmelons can be combined as they have a common treatment pathway; and capsicums, cucumbers, tomatoes, scallopinis and honeydew melons can be combined as they have a common treatment pathway.

Not withstanding that growers and packinghouses of rockmelons and zucchinis need not be specifically registered for the New Zealand program, each package of produce treated under this Section of the Manual will be marked in some way to identify the grower and packinghouse, and must be labelled with the exporter's name and address.

NOTE: should live fruit fly be found during AQIS or exporter inspections following treatment, the dipping treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the dimethoate treatment pathway will be suspended immediately for all Australian products until an

AQIS audit can be undertaken to determine the reasons for such failure, and MAF accepts the findings of this audit

3.4.2 Treatment details and treatment centre responsibilities

Dimethoate dipping/spraying requirements are as detailed in table 5 below.

TABLE 5

PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES FOR COMMODITIES EXPORTED UNDER APPENDIX 4 TO THE BQA

Commodity	Dip strength	Tolerance	Dip/spray	Time
Tomato	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Tomato	400ppm	±6% (±24ppm)	Spray	Spray for at least 10 seconds, and remain wet for at least 1 minute
Capsicum	400ppm	±6% (±24ppm)	Spray	Spray for at least 1 minute
Zucchini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Rockmelon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Cucumber	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Scallopini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute

Treatment centres using dimethoate sprays/dips for New Zealand produce must be registered with AQIS for this purpose. When applying for registration, treatment centres should present a procedures manual detailing how their process controls will be implemented. The details of process controls that must be in place are as follows:

- that purchase of bulk chemical be from fresh stocks and certainly made from stock which is not older than 18 months,
- how chemical is be stored at temperatures below 40°C, as it has been determined that at temperatures above 46°C (for even 1 day), the active ingredient will degrade and solution strength will be lessened.
- the use of oils or waxes during the preparation of product prior to the chemical dipping treatment is prohibited.
- all product being treated with chemical dip will be free of soil.
- the chemical dipping process must be the last preparation process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted, following dip treatment.
- the packinghouse/treatment centre will nominate a person/s to undertake the making up of dimethoate solutions and the recording of each consignment or batch lot that is treated and packed for New Zealand;
    - the nominated person/s must satisfy an AQIS authorised officer/inspector they are able to correctly determine the make up of chemical solution strengths, before a packinghouse/treatment centre will be permitted by AQIS to chemically dip/treat fruits destined for the New Zealand market.
- the packinghouse/treatment centre will make up chemical solutions immediately prior to use and will have systems in place for recording solution strengths. The packinghouse or treatment centre will also record details of the mixing of the solution and any topping up of the solution

during processing which allows for chemical wash out. Details will include the times and indicate volumes of product treated at the time of topping up.

- each treatment operator will be required to document their method/s of dipping and will include:
    - size of the dip tank,
    - method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc),
    - maximum volume of water required for any/each treatment,
    - amount of chemical needed to achieve the required ppm level active ingredient,
    - minimum allowable solution level,
    - maintenance of active ingredient level (i.e. "top up" levels).
- treatment operators will have an identification system in place which must identify treated products from untreated products and these must be placed on pallets/bins/crates etc in a clear, reasonably permanent manner.
- after dipping as many packages/crates as possible, product must be marked/identified as being "treated".

NOTE: when the processing of any batch is completed, the solution will be completely disposed of. Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems that can demonstrate that they are able to carry over solutions to a following day without losing effectiveness of the chemical solution.

3.4.3 Post treatment security - chemical dipping/spraying

Immediately following labelling of packaging, produce must be secured by either:

- shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet), or
- shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom, or
- coolstoring unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product, or
- coolstoring protected in secure packages at any temperature.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the State of operation for assessment and approval.

3.4.4 Post treatment transportation of product to export loading point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on treatment centre premises.
- supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.
- documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.
- the nominated person can be either the exporter's delegate or the operator of the treatment establishment.

- the exporter or the exporter's delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.
- the exporter or the exporter's delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,
    - if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce or the untreated produce must be properly secured.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.4.5 Phytosanitary certificate endorsements

General endorsement - 1

Cucurbits

"The produce (name) in this consignment has been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

Capsicums and tomatoes

"The produce (name) in this consignment has been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

All commodities

"The produce (name) in this consignment has been inspected in accordance with appropriate official procedures and found to be free of any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

General endorsement - 3

All commodities

"The produce (name) in this consignment has undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

Specific Endorsement - Tomato

“This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia”.

NOTE: it is permissable to use one instance of each of the above additional declarations on a phytosanitary certificate to cover a number of commodities. For example, if capsicums and tomatoes were combined as a consignment, General endorsement - 1 would read…"The capsicums and tomatoes in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

3.5 Cold Storage

COLD STORAGE IS KNOWN AS APPENDIX 5 TO THE BQA/IHS

Citrus fruits, **pears**, **tablegrapes** and **avocadoes** are permitted to be treated by cold storage disinfestation for export to New Zealand.

3.5.1 Registration requirements

Grower

- Citrus fruits - growers of citrus fruits in Queensland must be registered with AQIS for the purpose of maintaining field controls for the Risk Group 2 pest *Guignardia citricarpa* (citrus black spot). State departments in the other states survey for citrus black spot, negating the need for grower registration.
- Pears - growers are not required to be registered for pears that are grown for export under this treatment.
- Tablegrapes – grower of grapes must be registered for the purpose of maintaining field controls for the Risk group 2 pest Conogethes punctiferales (yellow peach moth). AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus (hibiscus mealybug).
- Avocadoes - growers of avocadoes must be registered with AQIS for the purpose of maintaining field controls in accordance with New Zealand requirements for the Quarantine Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.

Packinghouse

- Citrus fruit - packinghouses that are packing Queensland citrus fruits for export to new Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Packinghouses in other states are not specifically required to be registered.
- Pears - packinghouses are not specifically required to be registered for pears that are being packed for export to New Zealand under this treatment.
- Tablegrapes - packinghouses are not specifically required to be registered for tablegrapes that are being packed for export to New Zealand under this treatment. It should be noted that tablegrape exports are required to undergo mandatory fumigation for the health pest *Lactrodectus hasselti* (Australian red-back spider). If packinghouses are undertaking this fumigation they must be registered for that purpose - refer to section 11 of this manual.
- Avocadoes - packinghouses that are packing avocadoes for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises.

Treatment centre

- All products - cold disinfestation treatment centres must be registered with AQIS for treatment of New Zealand BQA produce, as required under the Export Control Act and Fresh Fruits and Vegetable Orders. Treatment details and treatment centre responsibilities are detailed in section 3.5.2 and section 8 of this manual.

Exporter

- All products - exporters of these commodities under this treatment must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 9 of this manual. Export documentation for these commodities must refer to Appendix 5 to the BQA.

NOTE: should live fruit fly be found during AQIS or Exporter inspections following treatment, the cold storage treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the find.

Should live fruit fly be found during New Zealand MAF on-arrival inspections of treated fruit, the cold storage treatment pathway will be suspended immediately for all Australian products until an AQIS audit can be undertaken to determine the reasons for such failure and MAF accept the findings of this audit.

3.5.2 Treatment details and treatment centre responsibilities

Table 6 below details the permitted temperature and times for cold storage disinfestation treatments.

TABLE 6
APPROVED COLD STORAGE
DISINFESTATION TREATMENTS

Commodity	Temperature	Period
Pear, tablegrape, citrus fruits (option 1)	≤ 0°C	13 days
Pear, tablegrape, citrus fruits (option 2)	1°C (± 0.6°C)	16 days
Avocadoes	1°C (± 0.2°C)	16 days

3.5.2.1 Cold disinfestation procedures

Registered treatment centres must have documented procedures in place for receival, identification by grower and packinghouse, segregation of all New Zealand destined fruits and marking/labelling all New Zealand BQA/IHS produce.

The following specific requirements must be in place to enable cold storage treatment centres to become registered for the New Zealand program:

- minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of fruit or less. For each additional 250 cu.m. of fruit, or part thereof, one additional pulp sensor will be used.
- thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to staff using this equipment for temperature checks.
- the warmest area of each coolstorage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One sensor will be placed in fruit pulp at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors.

3.5.2.2 Temperature recording

The following temperature recording requirements must be available before treatment centres will be registered for the New Zealand trade in BQA/IHS commodities:

- Continuous - strip charts or data log sheets will be held for each cold treatment batch. Note: temperature recorders must be capable of monitoring fruit pulp temperatures—Ryan, Cox or similar air temperature recorders are not acceptable.
- Intermittent - sensor temperatures will be manually recorded twice daily (morning and afternoon) for each day of the cold treatment and verified once every 4 days by an AQIS authorised officer.

Temperature records will be retained for auditing purposes by AQIS/MAF

NOTE: where the refrigeration unit is equipped with a print out recorder, the AQIS inspector will initiate the treatment when the treatment chamber has stabilised at the required temperature. When cold disinfestation treatment is completed, the AQIS inspector will sign that the treatment has been satisfactorily undertaken and the records covering the treatment will be copied with one copy being retained by the treatment facility and the second copy being retained by the AQIS inspector and filed.

3.5.2.3 Record requirements

Details required to be recorded include;

- date and results of sensor/probe calibrations
- date chamber was loaded with produce
- type and variety of produce treated, the quantity by lots involved, all to be identified by packinghouse and exporter.
- date the maximum pulp temperatures initially recorded 1°C ± 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded or date the pulp temperature of the fruit within the chamber recorded 13 days at 0° or below or equivalent.
- either continuous print out records or records of a.m. and p.m. temperatures within the chamber on a daily basis throughout the treatment program.
- date produce was cleared from chamber with details of post treatment security and dispatch of produce.
- date and results of re-calibration of sensors following completion of treatment.

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of treated produce whilst on their premises.
- supervision of loading and unloading of all consignments into and out of their premises, identifying and segregating those consignments intended to be treated for New Zealand.
- documenting all incoming and outgoing produce that is intended to be exported to New Zealand.
- the nominated person/s can be either the exporter's delegate or the operator of the treatment establishment.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or product substitution can occur for New Zealand destined produce.
The exporter or the exporter's delegate will ensure that the transport medium is clean and that other products (i.e. unsecured packages of untreated commodities) that could cause cross infestation of cleared produce are not to be loaded without taking appropriate security precautions.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.5.2.4 Auditing requirements – cold storage disinfestation centres

The Senior Inspector (Exports) will be responsible for arranging an audit schedule for cold disinfestation centres and will consider the number and size of treatments being undertaken in determining frequency of audits. It is recommended that each cold disinfestation treatment centre should be audited at least twice during the operating season.

Audits will cover the receival (packer – exporter lots), segregation, identification and treatment of batches and the recording and despatch records, security arrangements when product is loaded, for all treated produce.

3.5.3 Post treatment security - cold storage disinfestation

Once cold-disinfestation treatment has completed, the product must be maintained in such a way so as to ensure reinfestation cannot occur.

3.5.4 Post treatment transportation of product to export loading point

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on treatment centre premises.
- supervision of loading of all consignments out of treatment centre premises, signifying the status of the consignments intended to be inspected/treated for New Zealand.
- documenting all outgoing produce that is intended to be exported under the related BQA/IHS appendix.
- the nominated person can be either the exporter's delegate or the operator of the treatment establishment.
- the exporter or the exporter's delegate will arrange appropriate transportation of treated produce to ensure that no cross infestation or product substitution can occur to the New Zealand destined produce.
- the exporter or the exporter's delegate will ensure that the transport medium is clean and is not loading other products (i.e. unsecured packaging of untreated commodities), that could cause cross infestation of cleared produce,
    - if unsecured packaging of untreated produce will be loaded onto the same transport, either the treated produce or the untreated produce must be properly secured.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS authorised officer.

3.5.5 Phytosanitary certificate endorsements

General endorsement - 1

"The produce (name) in this consignment have been treated in accordance with Appendix 5 of the

Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The produce (name) in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

Specific endorsement - Avocadoes

“The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid”.

Specific endorsement - Tablegrapes

“The grapes in this consignment have undergone approprite pest control activities that are effective against *Latrodectus hasselti* and *Conogethes punctiferalis*”.

"The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*":

Specific endorsement - Citrus

“The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa*”.

NOTE: the States of South Australia, New South Wales and Victoria, through their Departments of Agriculture, conduct surveys for *Guignardia citricarpa*, and these States are considered free of this disease at this time. The above additional declaration, however, must be inserted on all phytosanitary certificates for citrus fruits regardless of origin.

3.6 Non host status

NON-HOST STATUS IS KNOWN AS APPENDIX 6 TO THE BQA

Some commodities are agreed to by MAF as having non-host status. **Pineapples of the smooth cayenne variety** are fruits which are regarded as a non-host of endemic Australian fruit flies and can be shipped under the BQA subject to normal AQIS inspection and phytosanitary certification. It is important to note that non-host status applies only to Australian endemic species of fruit flies and therefore, should Australia have an incursion of an "exotic" species of fruit fly for which pineapple may be a host, this Appendix to the BQA may be suspended until the fly is eradicated.

3.6.1 Registration requirements

Grower

Growers are not required to be registered for smooth cayenne variety pineapples that are grown for export under this treatment. However, growers of pineapple consignments being shipped to New Zealand must have records which can verify the variety of pineapple to be of smooth cayenne parentage.

Packinghouse

Packinghouses are not specifically required to be registered for smooth cayenne variety pineapples that are being packed for export to New Zealand under this treatment.

Not withstanding the above, all packages of non-host produce being exported under appendix 6 to the BQA must be clearly marked with some form of grower and packinghouse identification, and exporter's name and address.

Treatment centre

There are no treatment centre requirements.

Exporter

Exporters of smooth cayenne variety pineapples under this treatment must be registered for this purpose. Export documentation for this commodity must refer to Appendix 6 to the BQA.

3.6.2 Treatment details and treatment centre responsibilities

Nil requirements

3.6.3 Post treatment security - non-host status commodities

All smooth cayenne variety pineapples must be secured and protected against substitution or malpractice at all times during transit of fruits which are destined for New Zealand.

3.6.4 Post treatment transportation of product to export loading point

Exporters are required to ensure that adequate security from point of loading ex packinghouse through to final export loading has been delegated or undertaken directly by the exporter. Records must be kept throughout any transport movement of non-host products.

3.6.5 Phytosanitary certificate endorsement

General endorsement - 1

"The pineapples in this consignment has been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The pineapples in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

3.7 Heat Treatments

HEAT TREATMENTS ARE KNOWN AS APPENDIX 7 TO THE BQA

Australia is not permitted to use heat treatment disinfestation methods for fruit fly host materials exported to New Zealand at this time.

Heat treatments such as vapour heat treatment (VHT) and high temperature forced air (HTFA) are recognised treatments for some commodities however, at this time, Australia has not submitted any efficacy data to MAF seeking approval of VHT or HTFA as approved treatments for all nominated fruit flies for any Australian commodities.

NOTE: Australian disinfestation work for VHT has only been conducted with relation to Queensland and Mediterranean fruit flies.

Should any heat treatments be approved by MAF in the future, requirements and conditions will be included in this Manual at that time.

3.8 Nil

There is no treatment associated with appendix 8 to the BQA.

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3.9 Nil

There is no treatment associated with appendix 9 to the BQA.

intentionally left blank

3.10 Field control programmes

FIELD CONTROL PROGRAMMES IS KNOWN AS APPENDIX 10 TO THE BQA/IHS

The field control programmes referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies**.

This Appendix is intended to be used in combination with other appendices rather than as a stand-alone treatment. For example, cucumber exports to New Zealand under the dimethoate dip treatment require both a post-harvest dip and pre-harvest field control programme— a combination of both Appendix 4 and Appendix 10 to the BQA.

The treatment/commodity combinations which require reference to this section of the manual are:

Section - treatment	**Commodity**
3.3 - Methyl bromide fumigation	Watermelon
3.4 - Dimethoate dip/spray	Capsicum, scallopini, cucumber, honeydew melon, tomato
3.11 - Winter window	Rockmelon, honeydew melon, cucumber, watermelon

3.10.1 Grower responsibilities

Growers of produce that requires in-field controls must be registered with AQIS for this purpose. Application for registration will be made to the AQIS office in the grower's region. To ensure there are no delays with processing and implementing registrations it is recommended that applications be forwarded to AQIS no later than 6 weeks before the anticipated harvest of the first crop. Applications must include a property map showing those blocks in which the relevant BQA commodities are to be grown.

Upon receipt of the Application, AQIS inspection staff will visit the property to validate blocks and crops and ensure the grower/s is/are aware of their responsibilities and issue the grower with a grower registration number. AQIS will undertake audits of grower properties throughout the growing/harvesting season. All audits of growers will be charged to the packinghouse that is packing the grower's fruits/vegetables.

Growers must commence applying recommended field controls at least 4 weeks prior to first harvest for New Zealand. Growers are required to conduct field monitoring and keep spray diary records for all activities relating to each block registered for the New Zealand program. A cucurbit grower declaration form (appendix 3.15 to this Manual) must be completed for each consignment of cucurbits to be exported to New Zealand in combination with appendix 10 to the BQA.

NOTE: the Queensland Department of Primary Industries (QDPI) has issued a Farm Note (F76/DEC92) which covers the requirements for field control programs against infestation of *Bactrocera cucumis*. This Farm Note will be the minimum Standard that AQIS will be measuring compliance against. Variations of recommendations in this Standard in regard to the application of sprays will only be permissable when using an AQIS approved crop monitor. All activities relating to field controls must be recorded and held on file for a 12 month period.

AQIS will monitor regularly and audit growers at intervals throughout the season to ensure compliance with the above requirements. Details of these audits can be found in section 4 of this manual.

Because the field control programme is an integral part of the overall treatment for certain commodities, post-harvest security of the produce must be maintained at all stages.

3.10.2 Packinghouse responsibilities

Packinghouses supplying commodities to New Zealand under Appendix 10 to the BQA will be registered for this purpose. Packinghouses must maintain a register (names, addresses and grower numbers) for all growers supplying commodities under this Appendix.

Packinghouses must identify produce receivals immediately as they arrive, and the product must be secured and segregated from all other produce, regardless of whether these other commodities are for export or domestic markets.

Produce packed under Appendix 10 must be packed as discrete lots and cannot be packed for the New Zealand program if any "non-field controlled produce" is located within the premises.

Packinghouses (if delegated responsibility by the exporter) will undertake a grower line inspection (600 units) for each grower making up a consignment. Persons undertaking these inspection procedures must be aware of the New Zealand pest lists for these commodities and be experienced in inspection duties. Records of these inspections (see Appendix 3.4) must be

Following packing, the produce must be immediately secured against possible reinfestation or cross- contamination. Security can be effected by one or more of the following means;

- produce is packed into non-ventilated cartons with gaps on the carton flaps not to exceed 1.6 mm. at any point,
- cartons/pallets can be put into discrete storage areas including cool or controlled temperature rooms,
- cartons/pallets can be covered by tarps or shade mesh cloth that are sandbagged to floor areas,
- shrinkwrapping of all cartons/pallets.

Should any treatment operator/packinghouse wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) in the state of operation for assessment and approval.

AQIS will monitor regularly and audit packinghouses at intervals throughout the season to ensure compliance with the above requirements. Packinghouses who are found to not be complying with identification, packing and final product security will be suspended from the program immediately.

As a general rule, existing packinghouses will be audited on an annual basis at a minimum. Packinghouses that have not recently packed for the New Zealand BQA, or who have just commenced packing for the BQA will be audited on a monthly basis in the first season. After this initial season auditing frequency may be reduced at the Senior Inspector (Exports) discretion.

3.10.3 Treatment centre responsibilities

The responsibilities of the methyl bromide fumigation and dimethoate dip/spray treatment centres are detailed in sections 3.3, 3.4 and 8 of this manual.

3.10.4 Exporter responsibilities

Exporters of commodities that require field control programmes must be registered with AQIS for this purpose. Exporter responsibilities are detailed in section 9 of this manual.

In particular, exporters are responsible for ensuring that the security of produce during all phases of transportation cannot be breached and that the produce cannot be reinfested or substituted. Produce that is to be transported to another destination for export loading must be strictly secured. The transport must be clean and not carrying any unprotected fruit fly host commodity. That is, either the other commodities are secured (shrinkwrap or similar) or the field control produce must be secured.

3.10.5 Phytosanitary certificate endorsements

Endorsements for these commodities can be found at sections 3.3, 3.4 and 3.11 of this manual.

3.11 Winter Window – Field control systems Approach

"WINTER WINDOW" ACCESS IS KNOWN AS APPENDIX 11 TO THE BQA/IHS

A "winter window" access period has been negotiated between MAF New Zealand and AQIS, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly). The "winter window" therefore specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment of these commodities. The access period is for those cucurbits exported (arriving in New Zealand) between **1 May and 30 September in any year**.

Although cucurbits require no post-harvest treatments for cucumber fly for "winter window" access, additional fruit flies have been listed as Risk Group 3 pests for most cucurbits. Area freedom for these other flies must be established before these commodities can be exported to New Zealand under this appendix.

Accordingly, **rockmelons, honeydew melons** and **cucumbers** can be exported under this appendix, but only from the states of Queensland, New South Wales, Victoria and Tasmania (for which area freedom from Mediterranean fruit fly has been established).

As cucumber fruit fly is the only Risk Group 3 pest listed for **watermelons**, this commodity can be exported under this appendix from all areas in Australia.

Because Queensland fruit fly has been listed as a pest of **zucchinis** and **scallopinis** (in addition to Mediterranean fruit fly and cucumber fruit fly), zucchinis and scallopinis can only be exported from areas where area freedom from both Meditteranean fruit fly and Queensland fruit fly has been established (that is, the Riverland, Sunraysia, MIA-Riverina and Tasmania). Exports of zucchinis or scallopinis from these areas should therefore be referenced to Appendix 2 to the BQA (fruit fly area freedom), rather than Appendix 11.

Should live fruit fly infestation be found in New Zealand the consignment will be reshipped, destroyed or subject to treatment at the New Zealand Ministry of Agriculture and Forestry – Chief Plants Officer's discretion (on a case by case basis).

3.11.1 Registration requirements

Grower

- All products - growers of "winter window" commodities must be registered with AQIS for the purpose of maintaining field controls which minimise the risk of fruit fly infestation during production of the product. Please refer to section 3.10 of this manual.

Packinghouse

- All products - packinghouses that are packing "winter window" produce for export to New Zealand must be registered with AQIS because of their responsibilities in maintaining security of the product whilst it is on the packing premises. Please refer to section 3.10 of this manual.

Treatment Centre

- All product - there are no treatment centres associated with the "winter window" pathway.

Exporter

- All product - exporters of "winter window" commodities must be registered with AQIS for this purpose. Exporter responsibilities are detailed at section 3.10 and section 9 of this manual. Export documentation for these commodities must refer to Appendix 10 and Appendix 11 to the BQA.

☞ Rockmelons, watermelons, honeydew melons and cucumbers can be combined to make a single consignment, as all commodities have a common treatment pathway.

3.11.2 Treatment details and treatment centre responsibilities

There are no treatment centres associated with "winter window" trade.

3.11.3 Product security

Packinghouses must identify "winter window" receival immediately as they arrive, and the product must be secured and segregated from all other produce, regardless of whether these other commodities are for export or domestic markets.

Following packing, the produce must be immediately secured against infestation or cross-contamination. Security can be effected as detailed in section 3.10 of this manual.

3.11.4 Transporting and loading into export containers

If product is to be loaded into export containers at the packing premises, the packinghouse will ensure that there is minimum time delays in moving fruits/vegetables from the secure area into the container/s. Product should not be left in an unsecure environment for more than 15 minutes. This should enable the packinghouse to attend to any trade description requirements, which may need to be applied before final loading.

“Winter window” fruits/vegetables which are to be transported to another destination for export loading must be subjected to strict security provisions. The transport must be clean and not carrying any unprotected fruit fly host commodity. That is, either the other commodities are secured (shrinkwrap or similar) or the “winter window” produce must be secured.

The exporter must delegate nominated persons to ensure security of produce will be maintained and the nominated persons must acknowledge and accept these responsibilities in writing.

The receival depot or centre must be able to unload the “winter window” fruits/vegetables quickly and secure the produce immediately on arrival. Security will be as indicated in Section 3.10.2 above.

The receival depot/centre will, when loading the fruits/vegetables into a final destination container, ensure the movement of fruits during loading will cause minimum time delays to ensure the produce is not exposed to the environment for any period exceeding 15 minutes.

AQIS will audit receival depot/centres at least monthly to ensure compliance is being maintained. Additional audits may be undertaken at the discretion of the Senior Exports Inspector.

3.11.5 Phytosanitary Certification

General endorsement - 1

"The cucurbits (name) in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

General endorsement - 2

"The cucurbits (name) in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"

General endorsement - 3

"The cucurbits (name) in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

NOTE: it is permissable to use one instance of each of the above additional declarations on a phytosanitary certificate to cover a number of commodities. For example, if watermelons, honeydew melons and cucumbers were combined as a consignment, General endorsement - 1 would read…"The watermelons, honeydew melons and cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia"

3.12 Irradiation treatment

IRRADIATION IS ALSO KNOWN AS APPENDIX 12 TO THE BQA

Irradiation treatments are still under development, and as such, Australia is **not** permitted to use irradiation treatment on fruit fly host materials exported to New Zealand at this time.

Should irradiation treatments be approved by MAF in the future, requirements and conditions will be included in this manual.

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Attachment 1 to Section 3 – Summary of requirements for access of fruit fly host commodities into New Zealand from Australia

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Avocado	Area freedom	□	□	□		□	- "The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid"
Avocado	Cold storage 1°C (±0.2°C) for 16 days	□	□	□	□	□	- "The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid"
Banana	**Export prohibited**						
Capsicum	Area freedom	□	□	□		□	- "The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF".

COMMODITY	TREATMENT	REGISTRATION REQUIRED	ADDITIONAL DECLARATIONS

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

		GR	GM	PR	TR	ER	
Capsicum✞	Dimethoate (spray only) 400ppm and fruit must be sprayed for a minimum of one minute	□	□	□	□	□	- "The capsicums in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF".
Citrus	Area freedom	QLD	QLD	□		□	- "The citrus in this consignment has been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa*"
Citrus	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	QLD	QLD	□	□	□	- "The citrus in this consignment has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa*"
Cucumber	Area freedom			□		□	- "The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk group 2 regulated pests specified by NZ MAF"

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Cucumber✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	□	□	□	□	□	- "The cucumbers in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Cucumber✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Grape	Area freedom	□	□	□	□	□	- "The grapes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The grapes in this consignment have undergone appropriate pest control activities that are effective against *Latrodectus hasselti and Conogethes punctiferalis*" - "The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Grape	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	□	□	□	□	□	- "The grapes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The grapes in this consignment have undergone appropriate pest control activities that are effective against *Latrodectus hasselti and Conogethes punctiferalis*" - "The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*"
Honeydew	Area freedom			□		□	- "The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Honeydew✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	□	□	□	□	□	- "The honeydew melons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF"
Honeydew✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The honeydew melons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Mango	**Export prohibited**						
Papaya	**Export prohibited**						
Pears	Area freedom			□		□	- "The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Pears	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days				□	□	- "The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Pineapple (smooth cayenne only)	Non-host status			□		□	- "The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
Pumpkin	Area freedom			□		□	- "The pumpkins in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pumpkins in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry"
COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Rockmelon	Area freedom			□		□	- "The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Rockmelon	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute				□	□	- "The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Rockmelon✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The rockmelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Scallopini	Area freedom			□		□	- "The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Scallopini✞	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	□	□	□	□	□	- "The scallopinis in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Strawberry	Area freedom			□		□	- "The strawberries in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry"
Strawberry	Methyl bromide 48g/m^3 for 3 hours at a temperature of at least 15°C				□	□	- "The strawberries in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry"
Tomato	Area freedom			□		□	- "The tomatoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Tomato✞	Dimethoate (spray or dip) 400ppm and fruit must remain wet for a minimum of one minute	□	□	□	□	□	- "The tomatoes in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - "This produce has been treated in accordance with the arrangement between the New Zealand Ministry of Agriculture and Forests and the Australian Quarantine and Inspection Service concerning the access of tomatoes (variety to be named) into New Zealand from Australia"
Watermelon	Area freedom			□		□	- "The watermelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Watermelon✞	Methyl bromide 32g/m^3 for 4 hours at a temperature of 21°C to 26°C	□	□	□	□	□	- "The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Watermelon✞ (1 May – 30 Sep)	Winter Window	□	□	□		□	- "The watermelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
		GR	GM	PR	TR	ER	
COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required
PR packinghouse registration required
TR treatment registration required
ER exporter registration required

Zucchini	Area freedom			□		□	- "The zucchinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Zucchini	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute				□	□	- "The zucchinis in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"

✞ the commodity/treatment also requires in-field controls
GR grower registration required
GM grower monitoring and spray diaries required

PR packinghouse registration required
TR treatment registration required
ER exporter registration required

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SECTION 4. MANAGEMENT RESPONSIBILITIES

This section lists and describes the responsibilities associated with any BQA/IHS export pathway to be performed by all those organisations, groups and individuals to ensure that the BQA/IHS is developed, maintained and audited to standards that ensure confidence in the systems being implemented and accuracy in the phytosanitary certification which must be provided for export of fruit fly host products to New Zealand.

4.1 AQIS Canberra Office

The AQIS organisation structure and management flow chart is at Attachment 1 at the end of this Section. It is recommended that each AQIS Regional Office and/or State Department develop its own organisation structure and management flow chart as it will apply to the management and auditing of the Australian - New Zealand BQA/HIS, and include this information for distribution within that State.

Manager - Plant Programs Section - Animal and Plant Programs Branch

- will be responsible for ensuring;

    - all components of the BQA/IHS Systems Operations Manual are being complied with consistently, over all commodities and treatments through all States.
    - by delegation within Plant Programs Section, for all establishments/premises that are required to be registered, that regular audits of State Departments (where applicable) and AQIS Region/State Office systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the BQA/IHS and that a proper record management system is available and easily accessible.
    - that AQIS Region/State Offices are conducting audits of Certification Assurance (CA) establishments in accordance with the requirements of QMP - SM - 01 and the requirements of the BQA/IHS and this Manual.
    - wherever deficiencies are found in the systems (either at or within the States' responsibilities) that any adverse findings are recorded and corrected at the earliest opportunity and are subsequently re-audited to verify that corrective action requests have been satisfactorily implemented.
    - collate and circulate up to date National lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.
    - that all amendments to this Manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.
    - that audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

4.2 State Departments of Agriculture (or equivalents)

Where AQIS is not directly represented at State level (Tasmania, Western Australia and Northern Territory), State Departments of Agriculture or their equivalents are responsible for the following;

- the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,
- ensure all exporters, treatment centres, packinghouses and growers (where applicable) are meeting the requirements of the BQA/IHS and the directions contained in this Manual,

- ensuring inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities from that State that are being exported to New Zealand,
- ensuring they have registered all required components of the export pathways for commodities being exported through that State and have a Register of registered growers, packers, treatment centres and exporters for the BQA/IHS commodities which have been forwarded to AQIS Canberra Office, and that there are systems in place to forward amendments to the Register on a frequent basis (monthly),
- ensuring that audits (including internal audits) are being conducted at the correct frequency so that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,
- ensuring that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed.
- where required, ensure that the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual State management plans (as submitted to MAF New Zealand), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of New Zealand NASS Standards 158.03.06 and 158.03.07 and
    - will report to AQIS Canberra Office any detections of economically significant fruit fly species found within trapping grids within 24 hours of identification.

4.3 AQIS State Offices

AQIS State Offices, through the Regional Managers and Program Managers (Exports), located in Queensland, New South Wales, Victoria and South Australia are responsible for the following;

- the daily management and supervision where required, of all components of the BQA/IHS and the directions given in this Manual,
- ensuring all exporters, treatment centres, packinghouses and growers (where applicable), are meeting the requirements of the BQA/IHS and the directions contained in this Manual,
- ensuring inspection staff are trained in the terms, responsibilities and conditions for all BQA/IHS commodities that are being exported to New Zealand from that State,
- ensuring they have registered all required components of the export pathways for commodities being exported through that State,
- ensuring that audits (including internal audits), are being conducted at the correct frequency and that the measurement of the system and corrective action where required, has been effected and that all audit observations are recorded,
- ensuring that Canberra Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed,
- ensuring all inspectors in their State, involved in the New Zealand BQA/IHS export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported to them by Canberra Office, in any district of Australia,
- ensuring Canberra Office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

4.3.1 Registration Requirements

AQIS Offices and State Department agencies will implement a registration system for all growers (where applicable), packinghouses (where applicable), treatment centres and exporters who intend

to produce, pack, treat and export fruits and vegetables as listed in this Manual for export to New Zealand.

AQIS prefers that growers should register for the New Zealand programs with their packinghouse or exporter however AQIS will accept grower applications for registration at local offices, State Departments of Agriculture or their equivalent. Whichever authority accepts the registration of growers/properties, they will be responsible to ensure that registration details are forwarded to both the AQIS State Office and the AQIS Canberra Office. The accepting authority will also be responsible for ensuring grower spray and monitoring diaries are current and relevant.

Growers of commodities who require registration will not be permitted to participate in the New Zealand trade for that commodity, unless AQIS has details of the properties or blocks for registration, of that grower.

All organisations that are undertaking approved disinfestation treatments must be registered, packinghouses where required for specific commodities must be registered and all exporters of fruit fly host commodities (including non-host commodities) must be registered for each commodity.

It is the responsibility of each individual State/region to develop a system of recording Registrations, and that such records are maintained so they are auditable.

Registration details will include name, address, unique number identifier, purpose of registration (grower, packer, treatment centre etc.), and current status e.g. active/non active.

AQIS State Offices and State Department Agencies must forward a list of registrations made in that State to Canberra Office for an Australian consolidated list. A list of current registrations should be forwarded prior to the commencement of each commodity season and must be updated/amended as new applications are processed during a season. Canberra Office will make this list available to all State Offices/Agencies through the LAN computer network or hard copy documents.

NOTE: this information is extremely important, particularly when exporters are sourcing fruits from interstate but assembling export consignments in their home State prior to export to New Zealand.

4.3.2. Sampling Requirements

For the purpose of the treatments detailed in sections 3.3, 3.4 and 3.5 of this manual, the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

4.3.2.1 Consignment Line Samples

Following individual grower line inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines can only consist of fruit/vegetables from a common treatment pathway. For example, under appendix 4 to the BQA zucchinis and rockmelons can be combined as a consignment—scallopinis cannot be combined with these commodities as they are associated with a different pathway (ie, in-field controls as well as dimethoate).

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. There can be no rules of how this requirement is applied, however, the following guidelines may assist in determining selection of sample cartons;

- select one or more samples from the grower submitting the largest grower line within the consignment,
- select one or more samples from the commodity comprising the greatest quantity in the consignment line,
- select at least one carton from the commodity seen to present the greatest quarantine risk,
- select at least one carton from any known "poorer" performing growers/packers or from a newly registered grower or packer.

Consignment lines that are passed after AQIS inspection will be identified as "passed for New Zealand" and immediately separated from any other produce which has not been passed or is not destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.2.2 Grower Line Samples

A grower line is a number of packages of one commodity from one grower with one common treatment, presented for inspection at one time. This includes a grower line that is presented for inspection that will subsequently be split into separate consignments for export.

Grower lines that are passed after AQIS inspection, will be identified as "passed for New Zealand" and immediately separated and segregated from any other produce which has not been passed or is not destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.3.3 AQIS Inspection Procedures

AQIS will carry out inspections as required under the New Zealand BQA/IHS only where establishments provide an area which is suitable for the purpose and contains:

- a suitable bench or table on which to work,
- suitable fixed lighting of a minimum of 600 lux,
- a clean and relatively noise free area in which to perform inspection functions,
- all relevant BQA/IHS documentation covering the line to be inspected is available prior to the inspection commencing.

Inspections performed by AQIS for the BQA/IHS programs will be recorded on "Inspection Record - New Zealand", attached at Appendix 3.4.

NOTE: alternative types of Inspection records can be developed and used as long as they contain at least as much information supplied on the inspection record sheet as detailed in Appendix 3.4

AQIS inspection may be by grower line or by consignment line at the option of the exporter (but either the exporter or exporter delegate must have undertaken grower line inspections and provide detailed records of such inspections), and will be in accordance with the sampling plan detailed in Table 1 and at the same sample regime as used by the exporter/exporter delegate.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

NOTE: not withstanding the requirements of this Manual, should AQIS consignment inspection result in a rejection for quarantine purposes, the whole consignment is rejected not just that particular grower line. If the exporter requires the balance of the consignment for export purposes, the exporter/exporter delegate must re-inspect the balance of the consignment (as it is a new consignment line), by grower line before AQIS will re-inspect.

Exporters will provide AQIS officers with inspection records of the grower line inspection details before AQIS will commence their inspection. If all records are not provided or any records are incomplete, the consignment will not be inspected until these records are completed and sighted. AQIS will **not** accept outdated inspection forms.

NOTE: AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest. This must be undertaken until industry can provide clear scientific evidence that the mealybugs *Ferrisia virgata, Maconellicoccus hirsutus, Nipaecoccus viridis and Planococcus pacificus* are not associated with this export pathway.

4.3.4 Rejection Procedures

A rejection upon inspection by AQIS of either a consignment or grower line does not necessarily indicate that a packinghouse or grower has breached the conditions of the Arrangement. It should however indicate a possible problem within the packer/exporter system and therefore it will be recorded.

All rejections are to be recorded on Form Ex 161 (Inspection Advice Note) and must detail the grower, packer and exporter/delegate through which the commodity has passed.

Exporters/exporter delegates who fail two inspections in any one season must be audited immediately. This will ascertain if there are reasons that AQIS may consider necessary for suspending the nominated inspector/quality controller from the New Zealand programme, or if corrective actions can be implemented quickly and there is a possible need for a follow up audit within 7 days.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for Quarantine Risk Group 3 Pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of "Area Freedom from Fruit Flies", all area freedom districts in that State are suspended. Audit/s must be undertaken at the earliest opportunity.
- Any rejection for Quarantine Risk Group 2 Pests - Senior Inspector/Supervisor to be informed immediately to consider if audit of grower, packer, exporter or exporter delegate is necessary. This may depend on type and quantity of infestation detected.
- Any rejection for Quarantine Risk Group 1 Pests - The consignment can be totally withdrawn from the New Zealand export market, or corrective action can be undertaken. Corrective action can be performed by either treating the product (fumigation etc.) or by the exporter withdrawing the offending part of the consignment and undertaking reinspection before re-presenting the remaining part of the consignment for further AQIS inspection.

4.3.5 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand. This procedure will allow one inspection at the fee for service rate.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed including any that may have not been forwarded to New Zealand (That is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: the "split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has given approval that the necessary documentation and record keeping to be used for these procedures is both satisfactory and auditable.

Split consignments, where exporters/importers want to reduce the MAF on arrival inspection, must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

- notification of consignment details to MAF as they occur,
- the New Zealand communication links (importer and MAF contacts),
- flow chart detailing how the phytosanitary certificate moves through the system.

Each such procedure must have AQIS and MAF approval before implementation.

4.4 Untreated Produce Being Forwarded from Country Areas

Growers of commodities which require in-field controls, Certification Assurance (CA) establishments and, who will be forwarding untreated produce from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate) signed by an authorised AQIS officer, or a signed copy of an EX 28 Notice of Intention to Export, or, a grower declaration form attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide either the transfer certificate, Notice of Intention to Export or grower

declaration to AQIS, prior to any AQIS inspection being undertaken.

4.5 AQIS Auditing Requirements

Auditing is necessary to ensure that all parties are meeting their obligations as set out in this manual. It is therefore essential that during an AQIS audit of growers, packinghouses, treatment centres, exporters and exporter delegates, the auditor confirms that the auditee is using the current version of this manual.

4.5.1 AQIS BQA/IHS Audit Requirements

AQIS inspection staff are to conduct audits of growers (where applicable) to ensure compliance with registration requirements. Such audits are to include an assessment of growing practices, field hygiene, pest monitoring, spray diary entries and SBV status (avocado growers only). AQIS however, may not audit all individual growers who are supplying fruit to:

- *CA accredited packinghouses,
- Packinghouses who pack commodities which do not require grower registration,
- *Growers who are using the services of a registered crop monitor.

* However, some growers under these regimes must be audited as part of the audit of the packinghouse establishments as documented in Grower/Audit frequency, Section 4.8.1 of this Manual.

4.5.1.1 Grower/Audit Frequency:

Grower registration is required for some of those commodities for which Risk Group 2 pests are listed, and for those commodity/treatment pathways which must make reference to Appendix 10 to the BQA. Registered growers must undertake all the required monitoring and field controls, and keep records of all management surveillance and corrective actions.

AQIS will audit growers of these commodities to ensure compliance with the directions given in this manual, and therefore, phytosanitary certification is undertaken in accordance with New Zealand's requirements.

The accepting authority for grower registrations will ensure audits are conducted and ensure property records are maintained in accordance with the directions in this Manual.

Upon application to be a registered grower, the accepting authority will conduct an “initial” audit of the grower's property and record keeping, to satisfy themselves that the grower can meet the requirements of this Manual for that commodity. Following an initial audit, growers will have at least one other "additional audit" during the subsequent growing season.

NOTE: the AQIS audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure that the requirements of the new treatment are being met, and to identify any problems or potential problems with implementing the treatment.

For growers previously registered and having successfully participated in the New Zealand program the previous season/year, one audit will be formally conducted early in the new picking/packing season. (That is, no initial audit is required in subsequent years/seasons providing registration and supply to New Zealand has been continuous).

Should deficiencies be found at anytime during the registration period, follow up audits will be required to ensure corrective actions have been completed which will allow registration to be continued. Should a grower not manage the registered property in accordance with the directions of this Manual, and make no corrective action where deficiencies are detected, the property must be placed under suspension from the New Zealand program.

Where an Agency other than AQIS has placed a property under suspension from New Zealand trade, that Agency must inform their AQIS State Office of the suspension at the earliest opportunity. The AQIS State office will advise inspection staff in the area of property suspension and advise AQIS Canberra Office as soon as possible after obtaining such a report.

All audits of growers (AQIS or State Department staff), will be "announced audits" giving the grower at least two days notice. All AQIS audits are chargeable with the times involved being debited to the exporter or packinghouse with whom the grower will be supplying product.

Unannounced monitoring audits can be conducted if in the opinion of the Senior Inspector (Exports) a need is demonstrated. Unannounced monitoring audits are not chargeable unless a major non-conformance is detected.

4.5.1.2 Grower Audits - Certification Assurance Systems

Where a packinghouse has an approved Compliance Agreement with AQIS, and is involved in a commodity for which the grower must be registered, the packinghouse must register and audit those growers to ensure that the stipulated field management controls are being effected.

During normal AQIS auditing of an establishments' CA Arrangement, a sample of registered growers will be audited as part of the overall quality system for compliance with the requirements of the BQA/IHS and the directions given in this Manual. If a major non-conformance is detected at such grower audits, the suspension of the packinghouse may be considered necessary as it is the packinghouse that is responsible for ensuring compliance with AQIS/New Zealand requirements.

4.5.1.3 Audit Requirements/Growers - Suspension Criteria

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

- no pest control or monitoring records,
- bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,
- bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.
- evidence of growers not committed to carrying out the requirements as set out in this Manual, no corrective action to control quarantine weeds/seeds or pests and diseases,

4.5.1.4 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow-up audit, should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

- inadequate monitoring/spray records,

- insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),
- evidence of quarantine weeds within the property (but not yet seeding),
- adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days or a week or so, is dependent on the type of problem and the relationship to growing/harvesting of the current crop. Senior Inspector (Exports) will have to determine whether follow up audits will be required or not.

4.6 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent) to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or their equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for, and, such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where, through AQIS packinghouse grower audits, it is found that at least three growers are covered by the same crop monitor, and grower audit reveals substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived by the Senior Inspector (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

4.6.1 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

- failure to maintain individual grower records,
- inadequate or incorrect records,
- failure to provide growers with a record of each visit including any recommended pest control measures,
- recommendations to growers to apply non-recommended or unregistered chemicals.

4.7 Audit Requirements/Packinghouses

All packinghouses packing BQA/IHS produce will be audited annually (minimum) for compliance with grower numbers/addresses registers, training of staff within the establishment, completion and storage of records and security responsibilities. Variance to audit requirements can be made at the discretion of the Senior Inspector (Exports).

Packinghouses involved in those commodities with Risk Group 2 pests, for which grower registration is required, will be subject to AQIS audit on initial application/registration under the New Zealand requirements, and then at least on one further occasion during the actual packing season.

Packinghouses which are involved in physical or chemical disinfestation treatments for the New Zealand BQA/IHS will be subject to auditing requirements against the directions contained in Section 3 - Approved Treatments, of this Manual.

A packinghouse that has been delegated and accepted exporter inspection duties as required by this Manual will be audited to ensure that all such inspections have been conducted in accordance with the directions of this Manual, and that proper records have been maintained and filed.

Where packinghouses are required to be registered under two or more of the above criteria, audits of each element requiring registration will be conducted in one audit.

If a packinghouse audit detects minor non-conformities against the requirements and directions of this Manual, the packinghouse will be required to address the concerns, and a follow up audit will be scheduled within 7 days. If a packinghouse audit detects major non-conformance in any element, consideration will be made as to whether the packinghouse should be suspended until the required corrective action has been implemented and successfully re-audited. The Senior Inspector (Exports) will have the authority to assess and implement the necessary actions, depending on the circumstances surrounding a non-conformance against the systems.

The basis of all packinghouse audits is to ensure it is performing its responsibilities for those commodities/treatments/inspections under the BQA/IHS arrangements and the directions of this Manual.

CA accredited packinghouses will be audited for compliance with the New Zealand BQA requirements under their existing audit programmes.

All audit time involved at the packinghouses is to be charged to the packinghouse involved.

4.7.1 Packinghouse Audits/Non Compliance

AQIS may deregister a packinghouse for the New Zealand BQA/IHS if:

- the packinghouse was sourcing fruit/vegetables from unregistered growers where it is a requirement of this Manual for them to be registered.
- the packinghouse did not have procedures in place for identifying commodity specific registered grower/s,
- the packinghouse did not mark packages with a registered grower and packinghouse number,
- the packinghouse did not have procedures in place to segregate commodity specific growing lines through the packing process, (including area freedom treatment commodities),
- the packinghouse did not have trained staff operating at the time of packing BQA/IHS produce that could recognise pests, disease and weed seeds that are of concern to New Zealand,
- the packinghouse did not have procedures in place to deal with suspect fruit with a sting, rot or bruise,
- the packinghouse did not comply with "inspection procedures" as delegated and accepted by them through their exporter,
- the packinghouse did not comply with any other requirement set out in the BQA/IHS and the directions contained in this Manual.

4.8 Audit Requirements - Treatment Centres

Each treatment centre (either fumigation, chemical dip/spray treatment or cold) is responsible for clear, precise, documented and auditable procedures that detail how product relating to the BQA/IHS process is handled. Such procedures will include:

1. How product is identified
2. How product is treated and marked as treated.
3. The treatment process and controls.
4. How treatment records are documented
5. How measuring equipment is calibrated and how often and by whom.
6. Security of product after treatment.
7. Segregation of treated product from untreated product.
8. Supervision of loading.

Each treatment centre establishment (excepting fumigation facilities which are subject to direct supervision of each treatment performed) will be audited by AQIS at least once a month unless a premise has a CA arrangement with AQIS. Audit reports will be kept on file for a period of not less than 2 years.

AQIS requires that all treatment centres (other than fumigation centres) be monitored on a monthly basis during their operating season, and that audit reports are to be kept detailing when auditing/monitoring checks were performed. These audits/monitoring checks can be undertaken as part of inspection duties where inspections are performed at such centres but reports must be written and placed on file when they are actually undertaken.

Note: the Senior Inspector (Exports) has the authority to vary the above audit requirements on the basis of compliance with the operating instructions of this Manual. That is, in the case of continued substantial compliance, audit intensity may be reduced; in the case of marginal compliance or repeated non-conformance, intensity may need to be increased.

Inspectors must ensure that:

- treatment facilities are maintained in a condition that will provide efficacy in treatment programs,
- all measurement gauges are calibrated regularly, and records are maintained to verify this,
- all movement of treated produce is documented, particularly in relation to load-out activity,
- product security is maintained at all times.

4.8.1 Treatment Centre Audits/Non Compliance

If monitoring/audit checks being carried out on treatment centre premises reveal non-conformances, an official audit must be scheduled as soon as possible so as to instigate corrective action. Findings that may lead to suspension as a registered treatment centre or increased audit scheduling under the BQA/IHS will include :

- insufficient/improper identification of treated and untreated product,
- incorrect treatments,
- improper documentation,
- no calibration or records of calibration regarding measuring equipment,
- no segregation of untreated product and treated BQA product,
- product not correctly marked as treated or secured after treatment.

All audit time is to be charged to the treatment centre involved.

4.9 Audit Requirements - Exporters

AQIS will perform an audit of all exporters registered for the New Zealand programme on an annual basis. All relevant documentation for all New Zealand BQA/IHS consignments must be made available to the AQIS authorised officer. Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter/exporter delegate inspections, export documentation including EX 186 - Transfer of Product (or equivalent documents), EX28's - Notice of Intention to Export and Phytosanitary Certificates.

4.9.1 Exporter Delegate Audits

In addition to any scheduled packinghouse audit where packinghouse personnel are also approved to act as an exporter delegate for the purpose of inspection, treatment and/or load out security, two audits per year will be conducted on the exporter delegates responsibilities and their records. Audits will include inspection documentation, knowledge of Risk Group 1, 2 and 3 pests, demonstration of inspection techniques, sample selection and knowledge of the inspection requirements of this Manual.

4.9.2 Exporter/Exporter Delegate - Non Compliance

An Exporter/Exporter Delegate may be suspended from the BQA/IHS if they are not

meeting their obligations as detailed in this Manual. Major non-compliance may include:

- failing to provide up to date and correct documentation, including Inspection Records, for New Zealand BQA/IHS product,
- failing to correctly sample and inspect product,
- failing to appropriately train (or be trained) Quality Control inspectors for the purposes of inspecting BQA/IHS product,
- failing to segregate BQA/IHS treated/passed product from non treated product,
- failing to fulfil any other requirement/responsibility as outlined in this Manual.

Additional audits (scheduled by the Senior Inspector (Exports)), will be scheduled where an audit reveals minor non-conformities occurring within the exporter/exporter delegate responsibilities. The exporter/exporter delegate audit costs will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made and agreed to by AQIS.

4.9.3 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

- exporter/delegate inspection records,
- grower pest monitoring records and pest control diaries (commodity specific),
- packer training and associated pest identification,
- premises general hygiene,
- cleanliness of machinery and equipment,
- segregation and identification of produce/products,
- staff responsibilities,
- exporter or exporter delegate performing inspections are competent in carrying out their duties and know correct identification of pests/weed seeds.

Should auditing prove satisfactory and fails to identify any breach of the BQA/IHS arrangement or responsibility under the programme, all parties will be immediately re-instated.

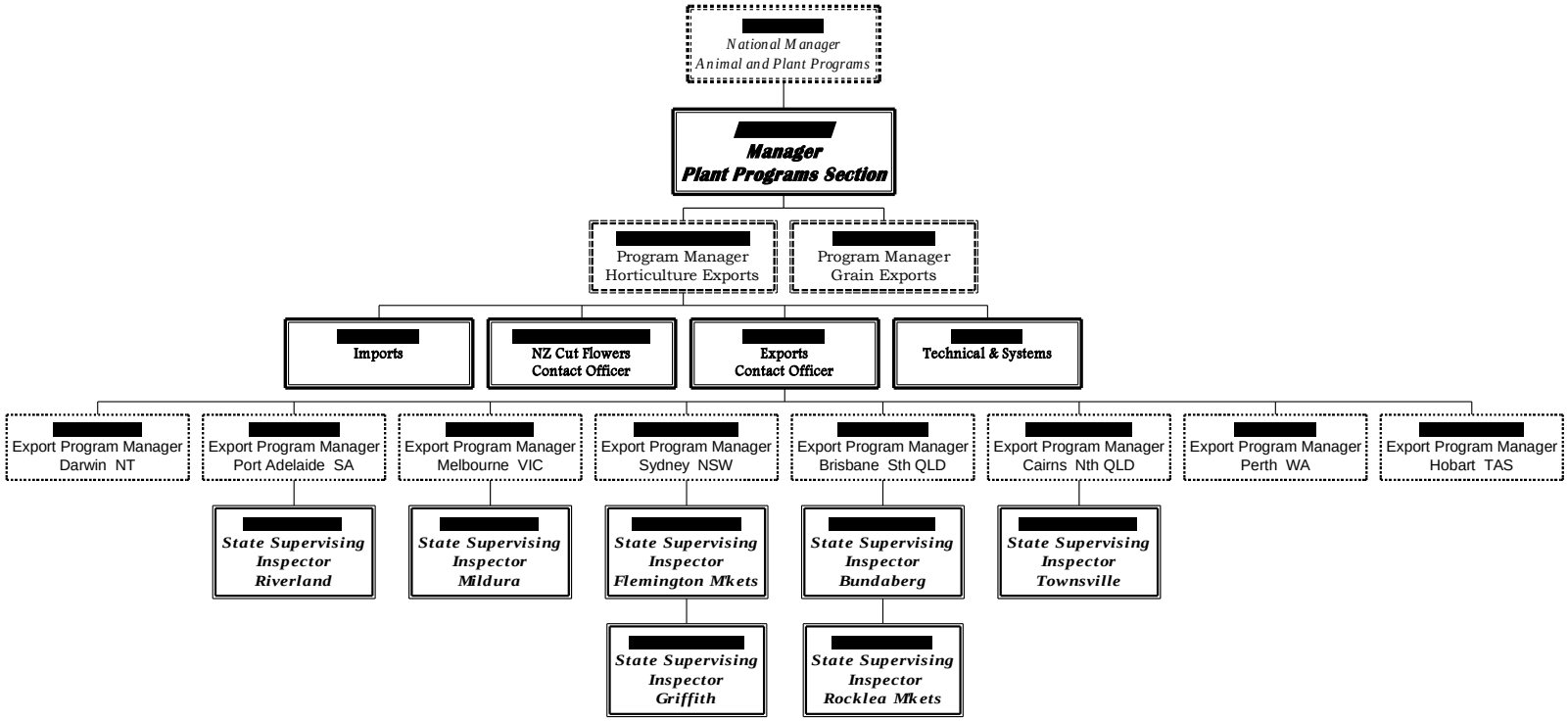
Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the State Senior Inspector (Exports) who will co-ordinate necessary action and advise all parties. Copies of any audit will be given to the relevant components of the pathway audited and kept on file in the State AQIS or Department office.

Inspectors undertaking these audits must be either AQIS AQA, AQIS CA or ISO/CA trained and accredited.

Attachment 1 to Section 4 – AQIS Plant Contact List

AQIS Plant Contact List



SECTION 5. GROWER RESPONSIBILITIES

5.1 Registration

Growers of commodities (excepting southern state citrus growers) for which in-field controls are required must be registered with AQIS for the purpose of exporting those commodities to New Zealand. These commodities include grapes,capsicums, tomatoes, avocadoes, citrus, cucumbers, honeydew melons, scallopinis and watermelons. Grower registration for the above cucurbits will include each block/property used to grow the cucurbits. A cucurbit grower declaration form (Appendix 3.15 to this manual) must be completed for each consignment of these cucurbits to be treated under appendices 3, 4 and 11 to the BQA.

NOTE: for tomatoes, only those growers exporting tomatoes to New Zealand under appendix 4 (dimethoate dip/spray treatment) to the BQA must be registered. This is because only approved tomato varieties can be grown for export to New Zealand under this appendix. Tomato growers must include in their registration application a map showing all blocks in which permitted tomato varieties are grown. Reference to individual blocks on this map will be made on the tomato variety declaration at appendix 3.10 of this manual.

Growers who must be registered for specific commodities will do so either by making application directly to AQIS or through their packinghouse or exporter. Packinghouses and exporters must forward any grower applications through to AQIS/State Offices for inclusion on the Master List (compiled by AQIS Canberra Office) of growers, approved for the New Zealand trade in that/those commodities that require grower registration.

Packinghouses/exporters who accept application for registration from growers will be responsible for maintaining all information which those growers will need to have in place to ensure compliance with the directions contained in this Manual and for auditing those growers in accordance with the directions contained in this Manual.

5.2 Responsibilities

Growers of those commodities detailed in 5.1 above must maintain spray monitoring diaries and implement field hygiene requirements that demonstrate an appropriate level of management and recording for those pests/contaminants listed as being Quarantine Risk Group 2 and 3 in the Pest Lists (as contained at Appendix 2 of this Manual).

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer)—however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the Southern states of New South Wales, Victoria and South Australia are not required to be specifically registered for this program, monitoring and spray diaries must be kept because of the Risk Group 2 pest *Phyllocnistis citrella*.

Growers must register each block or property/ies that they will be using to grow those commodities for which they need to be registered.

Growers of produce that is to be exported to New Zealand, for which in-field controls are required against Risk Group 3 fruit flies, must manage registered blocks/properties in accordance with the Queensland Department of Primary Industries Farm note "Cucurbits – recommended pest control programme for export to New Zealand".

Growers are permitted to use the services of AQIS approved crop monitors for the New Zealand BQA/IHS arrangements. Should growers use the services of an AQIS approved crop monitor, the grower must still maintain spray diaries showing implementation of any corrective actions undertaken on the New Zealand registered property/block/commodity.

Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered New Zealand grower that they are undertaking services for.

5.3 Grower Audits

The registering authority (State Department, AQIS, packinghouse or exporter), will undertake grower audits at the following frequency;

. in the initial year of registration,

- before the grower is approved as a New Zealand grower (before harvesting commences) and
- one further audit during the growing season.

. where grower registration is continuous, in subsequent years,

- once during the season.

AQIS audits of grower responsibilities will be conducted simultaneously with packinghouse/exporter audits. All audit time will be charged to either the packinghouse or the exporter.

Cucurbit growers that export produce to New Zealand under the "**winter window**" field control systems approach will be audited more frequently. AQIS will audit blocks/properties and monitoring diaries on a monthly basis.

NOTE: growers will not be charged for audits associated with the New Zealand BQA. All audit charges are to be invoiced to the packinghouse or exporter who is packing/accepting the registered growers' fruits/vegetables, unless another satisfactory arrangement is made between AQIS and the parties involved.

5.3.1 Grower Suspensions

Growers will be suspended from the New Zealand trade if spray and monitoring diaries are not accurately maintained throughout the year or growing season.

All registered growers (excluding southern state citrus) must maintain monitoring and spray diaries of their registered blocks. All activities shall be recorded even where pests are noticed but are of small infestation levels which are deemed inappropriate to control with chemical sprays.

The following considerations may be applied to growers during grower audits;

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

. no pest control or monitoring records,

. bad hygiene practices within the property (rotting infested produce) or unsatisfactory control of past crops,

. bad hygiene practices from an adjoining property, placing the registered property at risk i.e. severe quarantine weed build up (where weed seeds are determined to be of quarantine concern to New Zealand), past crop/s not being covered or disposed of, leading to greater risks of infestation.

. evidence of growers not committed to carrying out the requirements as set out in this Manual,

. no corrective action to control quarantine weeds/seeds or pests and diseases,

5.3.2 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow up audit should it be found that any of the following have occurred, which may jeopardise its participation under the New Zealand Arrangement:

. inadequate monitoring/spray records,

. insufficient care in disposal or chemical control of past crops (but not yet infected or diseased),

. evidence of quarantine weeds within the property (but not yet seeding). This is of particular relevance to the crops, table grapes and capsicums which are subject to this type of infestation,

. adjoining properties with potential risk of cross infesting with pests or disease or weed seed contamination.

Whether a follow up audit would be required within days, or a week or so, is dependent on the type of problem and the relationship to growing/harvesting of the current crop. Senior Inspector (Exports) will have to determine whether follow up audits will be required or not.

5.3.3 Audit Requirements/Crop Monitors

As mandatory grower registration for all BQA commodities is no longer required, the role of commercial crop monitors is obviously substantially reduced, however, where a grower is using a commercial crop monitor associated with commodities requiring field management controls, those crop monitors must be registered with AQIS for that purpose.

Crop Monitors must register with AQIS or a State Department of Agriculture (or equivalent), to undertake crop monitoring duties for the New Zealand BQA/IHS commodities. A Crop Monitor will include in their application, details of the registered growers that they will be supplying services to and the commodities which will be covered by these services.

Where it is a requirement of this Manual, commercial crop monitors will make registered grower property records available for AQIS/MAF audit when required to do so. AQIS/State Departments of Agriculture or their equivalent (where AQIS has no direct inspection services in that State), will perform random audits of each registered crop monitor at least once per year/season for each commodity that field monitoring services are provided for. Such audits will involve an audit of randomly selected growers. Audit time including grower visits, will be charged to the crop monitor.

Where, through AQIS packinghouse grower audits it is found that at least three growers are covered by the same crop monitor, and grower audits reveal substantial compliance with monitoring and spray control diaries, additional grower audits of that crop monitor may be waived by the Senior Inspector (Exports) in that State.

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of the grower part of this Manual simultaneously with the packinghouse requirements. In these instances, where compliance is found to be correct, no additional audits of the growers will be scheduled against the crop monitoring functions.

5.3.4 Crop Monitor Audits/Non Compliance

AQIS will deregister any commercial crop monitor for any of the following reasons:

. failure to maintain individual grower records,

. inadequate or incorrect records,

. failure to provide growers with a record of each visit including any recommended pest control measures,

. recommendations to growers to apply non-recommended or unregistered chemicals.

SECTION 6. PACKINGHOUSE RESPONSIBILITIES

Packinghouses that are packing fruits/vegetables for which in-field controls are required must be registered with AQIS for the purpose of exporting those commodities to New Zealand. These commodities include grapes, avocadoes, citrus, capsicums, tomatoes, cucumbers, honeydew melons, scallopinis and watermelons. Packers of rockmelons must also be registered if these commodities are exported to New Zealand under appendix 11 (winter window treatment) to the BQA. Packinghouses that have been delegated, and have accepted, exporter delegate responsibilities must also be registered for this purpose.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal packinghouse registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

Therefore, all packinghouses which are packing fruits/vegetables under the "Area Freedom" treatment (Appendix 2 to the BQA) must be registered for this purpose.

Packinghouses will however, maintain secure conditions for the packing of growers' fruits and will have systems in place to ensure grower identification and segregation of New Zealand fruits is maintained. That is, cross contamination with other commodities or the same commodity for markets other than New Zealand must be minimised.

All cartons of fruits/vegetables for the New Zealand export trade must be marked in some form with a grower and packinghouse identification. It is the exporter's responsibility to ensure that the exporter name and address is on all packages.

Packinghouses must have records identifying produce from each grower that is received, packing details and despatch details for each batch/consignment line of fruit that is to be certified for New Zealand.

6.1 Grower Registration - Commodity Specific

All packinghouses must provide a list of grower's names and addresses and designated numbers/codes for all suppliers of New Zealand BQA/IHS produce into that packinghouse.

As per Section 3 of this Manual, growers of some commodities will be required to be registered for the purpose of field management controls for pests which are determined to be Quarantine Risk Group 2 and 3 pests, or if they are growing commodities for export using the "**winter window**" field control systems approach. Commodity specific pests lists can be found at Appendix 1 to this Manual.

Where a packinghouse is packing fruits/vegetables for which in-field controls are required, all such fruits must only be sourced from registered growers of that commodity.

Growers of citrus fruits, whilst having the Risk Group 2 pest - Citrus leaf miner, will not need to be registered, although they must maintain spray and monitoring diaries for control of this pest.

Growers have the opportunity to make application for registration with AQIS, State Departments of Agriculture (or their equivalents), packinghouses or exporters. Where a grower makes application for registration with a packinghouse, the packinghouse is responsible to ensure:

- that the AQIS State Regional Office is aware of the registration/acceptance, and
- that all grower requirements as detailed at Section 5 of this Manual have/are being complied with, and
- the packinghouse will maintain records detailing audits of the grower property/block registered for the New Zealand BQA/IHS trade.

Packinghouses must have systems in place to ensure incoming produce is identified by grower and for commodities which have Quarantine Risk Group 2 pests that these commodities are segregated from any other fruits to minimise cross contamination of this produce.

6.2 Packinghouse Responsibilities - Commodity Specific

Packinghouses which are packing fruits/vegetables for New Zealand do not need to be specifically registered for the New Zealand export trade unless they are packing commodities requiring in-field controls, packing tomato varieties for export under section 3.4 of this Manual, or have been delegated and accepted duties/responsibilities by exporters.

Packinghouses that are effecting treatments as defined in the BQA or in this Manual must be registered for that purpose.

Therefore, all packinghouses which are packing fruits/vegetables under the "Area Freedom" treatment (Appendix 2 to the BQA), must be registered for this purpose. Similarly, all packinghouses packing commodities for export using the "**winter window**" field control systems approach must be registered to comply with the requirements of Appendix 10 and 11 to the BQA.

Packinghouses must ensure that the fruits/vegetables they are packing are free of all quarantine pests as contained in the pest listings at Appendix 1 of this Manual. This means all Risk Groups 1,2 and 3 and any Regulated non plant pests which are listed and are to be certified for on the phytosanitary certificate. Graders, sorters and packers must be trained to be able to recognise all pests and symptoms and to record findings of these pests.

Packinghouses packing BQA/IHS commodities for which they are required to be registered must perform a 600 unit inspection for each grower that makes up a consignment. This inspection does not replace an exporter or exporter delegate inspection for that commodity and must be undertaken regardless of exporter inspection requirements. Records of these inspections must be retained for audit purposes.

To help reduce the possibility of non-approved tomato varieties being inadvertently included in consignments destined for New Zealand, the approved tomato variety must be indicated (eg. stamped) on all export tomato cartons. To further help reduce this possibility, it is recommended that differentiation of export and domestic cartons be implemented. This already occurs in many instances, for example, different trading names/colours are used for domestic and export cartons.

6.3 Inspection Requirements

Where a packinghouse is registered for the New Zealand programme, that packinghouse must undertake grower line inspections for all consignments of New Zealand BQA/IHS produce. These inspections will be carried out using a 600 unit inspection sample for each grower making up the consignment. All inspection results will be recorded as per Inspection Record at Appendix 3.4 of this Manual.

The maximum time that can be run continuously for New Zealand is a 24 hour process. Therefore each daily run must be considered as one lot and all grower inspections must be undertaken on that day. A grower run cannot be continued over into a new day.

For packinghouses located in areas which are declared free of fruit fly, inspection staff must cut any fruits which are considered suspect (soft fruits, bruised or rot spots) and the results of the cutting must be recorded.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

6.3.1 Documentation

Where an exporter has delegated to the packinghouse the exporter inspection requirements, and where that packing establishment requires AQIS to undertake inspection at the establishment, the packinghouse will provide copies of the delegation request and confirmation as required under Section 9.6.

6.4 Security and Supervision Responsibilities

Where a packinghouse has been delegated and accepted exporter responsibilities in accordance with directions contained in Section 9.9 of this Manual the packinghouse must undertake and record all functions so delegated to them and which may include the following;

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and/or Export Permit (EX 28).

6.5 Packinghouse Audits

AQIS will audit all packinghouses involved in BQA/IHS listed commodities for compliance with grower names and addresses and allocated numbers/codes, and as appropriate, training of staff in the identification of pests associated with the commodity/ies being packed. AQIS will also audit packinghouses to determine compliance with identification, segregation and security of product whilst on the premises. Records pertaining to all the foregoing aspects will be checked for accuracy.

The frequency of audits of packinghouses will be at the discretion of the Senior Inspector (Exports) in each state, but there will be a minimum of one audit per packing season and where seasons are longer than 4 months, it is recommended a second audit should be scheduled for that year.

6.5.1 Application for Registration

An initial audit will be performed prior to the commencement of the season for the purposes of ensuring that the packinghouse has systems in place that will meet the identification, segregation, inspection, security (and where applicable treatments) and recording requirements of the New Zealand BQA/IHS.

At least one additional audit will be undertaken during the packing season.

6.5.2 Continued Registration

At least one audit will be performed during the packing season.

Additional audits may be performed, where as a result of an earlier audit, non-conformances were detected and a reappraisal of the systems following corrective action may be considered necessary.

6.6 Suspension of Packinghouse Registration

AQIS may impose suspension of a packinghouse should the packinghouse be found to not be performing it's responsibilities in the required manner. Depending on the reasons for invoking suspension, such suspension may only affect trade for the New Zealand BQA/IHS and not other markets.

Packinghouses who do not have sufficiently trained staff, appropriate segregation and security and identification procedures, or detailed records of their New Zealand packing arrangements, may be subject to suspension.

SECTION 7. COMPLIANCE AGREEMENTS - PACKINGHOUSE RESPONSIBILITIES

7.1 General Requirements

All fruits/vegetables for the New Zealand export trade must include grower numbers or equivalent codes and packinghouse numbers on each individual package. It is the exporter's responsibility to ensure that the exporter name and address is on all packages.

Packinghouses located in areas declared to be free of fruit flies must have a register of all growers names and addresses and allocated grower numbers for all suppliers of New Zealand BQA/IHS commodities.

Should packinghouses located in fruit fly area freedom districts become involved in area freedom suspension zones, those packinghouses must be able to provide grower registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals must then have procedures for identification, segregation and packing processes to ensure "area free" fruits cannot be contaminated whilst on the establishment and/or surrounds.

It is recommended that packing establishments have contingency plans within their quality manuals to address additional procedures that would be required in the event of fruit fly outbreaks in their district. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

Packinghouses who have Compliance Agreements with AQIS may incorporate the required New Zealand systems into their Quality Manuals and be audited simultaneously with normal auditing requirements.

Packinghouses which have accredited Compliance Agreements in place and who are packing commodities which do not have any Quarantine Risk Group 2 or 3 pests, and are not undertaking official disinfestation treatments, will not need to add any additional systems to their Quality Manuals.

However, packinghouses with Compliance Agreements that are packing commodities with Quarantine Risk Group 2 or 3 pests listed will need to ensure that the quality systems, procedures and management ensures, that grower registration, commodity segregation, identification and inspections are performed to meet the New Zealand certification requirements. It is likely that some Compliance Agreement Manuals will need to either be amended or have attached an Appendix to meet the new export requirements for New Zealand BQA/IHS commodities.

Packinghouses which are seeking Compliance Agreement accreditation for the New Zealand BQA/IHS must have 5 joint inspections (packinghouse – AQIS) to assess the ability of packinghouse inspection staff to undertake inspections for New Zealand in accordance with the directions contained in this Manual and before Compliance Agreement accreditation can be given.

Packinghouses who will also be conducting "treatments" under the BQA/IHS must be registered for this purpose in addition to normal registration requirements. Section 8 of this Manual outlines the requirements for Treatment Centres.

7.1.1 Auditing for New Zealand Requirements

Compliance Agreement accredited packinghouses who incorporate BQA/IHS commodity responsibilities within their current Quality Manuals will be subject to normal audit regimes which will incorporate any specific New Zealand requirements.

Compliance Agreement accredited packinghouses who wish to leave specific New Zealand BQA/IHS requirements outside their other compliance agreement accreditation will have the two systems audited separately but within the usual audit schedules that apply to that establishment.

Packinghouses which have responsibility for registering growers and ensuring adequate field control monitoring and spray diaries are properly maintained for specific Quarantine Risk Group 2 pests, will have a percentage of those registered growers audited at the packinghouse schedule audits to ensure compliance with the New Zealand BQA/IHS is in effect.

Where required, packinghouses who elect to register growers of commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. on initial registration
. following registration at least once during the growing season and
. in subsequent seasons, once during each growing season.

During AQIS Compliance Agreement audits, auditors will perform random audits of growers who are required to be registered under the BQA/IHS on the following basis;

. in the initial year of registration - 5% of all growers registered by the packinghouse
. subject to compliance with all requirements the previous year - reduce to 2 1/2% of all growers registered by the packinghouse or
. if nonconformances were detected at a previous audit - increase random selection of growers to 10% of all registered growers of that packinghouse.

Should a major nonconformance with the New Zealand BQA/IHS and the instructions contained in this Manual be detected at audit, the packinghouse will be suspended from the New Zealand trade in fruit fly host material immediately, and depending on the type of nonconformance, suspension from the AQIS compliance agreement may be considered. Such a decision will be given through the AQIS Compliance Agreement Contact Officer in that State in conjunction with State Regional Manager and Canberra Office.

7.1.2 Compliance Agreements - New Zealand Inspection Requirements

As most Compliance Agreements are based on “in-line” process controls rather than “endpoint” inspection regimes, Compliance Agreement packinghouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted where the Compliance Agreement establishment has systems in place that;

. address grower field controls (horticulture extension officers, reference to crop monitors etc.), and
. have some form of formal receival inspection records, and
. within the processing line have sorter and grader recording systems..

In order to properly document the required inspection for the New Zealand BQA/IHS, CA packinghouses will undertake “in-line” consignment line inspections according to the following;

TABLE 7

DETERMINING SAMPLE REQUIREMENTS
ACCREDITED AQIS CA ESTABLISHMENTS
IN-LINE PROCESS CONTROL

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 7 sets out possible sampling regimes that can be applied as in-line process controls within an accredited CA packing establishment. The maximum time that can be run continuously for New Zealand is a 24 hour process. It is extremely important that records showing this type of in-line process control are maintained for each consignment run for the New Zealand protocol.

All inspections (undertaken as indicated in Table 7) must be undertaken by the AQIS Approved Inspector. Where inspections are performed as per Table 7, these are consignment line inspections and individual grower line inspections are not required.

During inspection, any soft, bruised or fruits showing rot spots will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all fruits cut will be recorded on the inspection sheets.

Packinghouses can make up any type of sampling system based on the above table but it is important to document exactly what regime is to be used before the production run is commenced and that the sampling regime is representative of the consignment/s being assembled.

The packinghouse requirements covered in Section 6 of this Manual pertaining to identification, segregation, security and records for all New Zealand destined produce must be part of the Process Management System submitted to AQIS for approval.

7.2 Documentation

The identity of the exporter, in addition to the grower and packinghouse numbers will be included on all packages covered by the BQA/IHS.

For all product that is being transferred intrastate or interstate, documentation will be required to ensure that the receiving company and AQIS inspector can verify the security and integrity of a consignment on arrival. A declaration to the following effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not been exceeded."
Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

7.3 Post treatment Security

Where a CA packinghouse has accepted an exporter delegation for the security and loading supervision of BQA/IHS commodities the packinghouse will nominate the person/s who will be responsible for carrying out and recording the following:

. the security of cleared/treated produce whilst on their premises,

. supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,

. documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28).

SECTION 8. TREATMENT CENTRE REQUIREMENTS - AQIS SUPERVISION RESPONSIBILITIES

8.1 Registration

In addition to normal AQIS registration requirements under the Export Control Act, all establishments who undertake either physical or chemical treatments for the disinfestation of fruit flies for export of host commodities to New Zealand, must be registered specifically for this purpose. Application for registration will be made directly to AQIS Regional Offices in the State where registration is required.

8.2 Process Controls

All treatment centres which are registered for the New Zealand BQA trade must have a system of process controls and record keeping which can be audited at all times.

Treatment centres must have systems which demonstrate identification, segregation, process controls, separation of treated and untreated fruits, quarantine secure areas or quarantine secure packaging following treatment and supervision responsibilities when loading produce either direct to export or through exporters/freight forwarders.

Persons who are responsible for calibrating, measuring and recording will be appropriately trained to be able to undertake these responsibilities and understand their importance.

8.3 BQA Treatments - AQIS Supervision

Treatment centres will be subject to the following AQIS supervision during treatments;

8.3.1 Fumigation Centres

Where fumigation is being performed with the use of flexible tents, AQIS inspection staff will attend each fumigation which is being undertaken for the New Zealand BQA. AQIS will attend the treatment centre either at commencement of the treatment to be carried out or prior to the completion of the fumigation. AQIS officers will verify treatment dosages, calculations and gas retention general process controls for each fumigation treatment.

Treatment centres which are using fixed capacity fumigations (chambers or fixed tents), will be audited at the first fumigation treatment being performed for the New Zealand trade and then if substantial compliance is being effected 2 - 3 times during the season.

Fumigation centres must advise their local AQIS office 24 hours in advance of intended fumigation treatments. If it is difficult for AQIS to be in attendance at the required times, arrangements will be made between the treatment centre and the local AQIS office which will enable the treatment to go ahead but define how AQIS will manage the required supervision requirements.

8.3.2 Cold Storage Centres

AQIS inspection staff will undertake supervision of each cold disinfestation treatment. In normal circumstances AQIS will be required to be in attendance when sensors and probes are calibrated, both prior to and at the completion of each treatment. Inspection staff will also attend the cold disinfestation treatment centre once during the disinfestation period (normally about halfway through), to ensure that temperature recording is being maintained in the required manner.

Where cold disinfestation treatments are being undertaken using manual recording devices, AQIS inspection staff will attend for monitoring purpose at that treatment centre every 3-4 days during the treatment/s being undertaken.

8.3.3 Dimethoate Treatments

8.3.3.1 Waxed produce

The application of waxes or oils to produce prior to dimethoate treatment is prohibited for export of produce to New Zealand. The application of waxes or oils to produce which has completed the disinfestation treatment and completely dried will be allowed only at the discretion of the State Senior Inspector (Exports).

8.3.3.2 AQIS requirements

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment, however, AQIS inspection staff will undertake analysis of chemical dipping strengths on the following basis;

. during the first year of a treatment centre registration,

  - each month

. where registration has been continuous and without a nonconformance,

  - twice during the treatment season.

In addition to the above AQIS analysis, treatment centres which perform dimethoate dipping/spraying are required to have a recognised agency analyse the concentration of dimethoate used in their dips/sprays. This will be undertaken monthly during the first 3 months of the treatment season, followed by an additional sample if the treatment season extends for a period of greater than 4 months. Results of these analyses will be retained and made available to AQIS authorised officers upon request.

8.4 AQIS Audits of Treatment Centres

AQIS will conduct audits of treatment centres on the following basis;

Fumigation Centres

One annual audit during the first 10 days of each season (to be conducted during a treatment) to verify that treatment centre operators are trained in their responsibilities and know what information is required to be recorded.

Cold Storage Centres

One annual audit during the first three treatments of each season to verify that all treatment centre responsibilities are being maintained.

Dimethoate Treatment Centres

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season. For treatment centres who have undertaken successful audits in the first year, two audits per year/season thereafter will be undertaken, as long as compliance with the New Zealand requirements is being maintained.

All Treatment Centres

Should non-conformances be detected during the audit schedules covered above, additional audits may be required to ensure corrective actions have been implemented.

Should major non-conformances be detected during audit, the treatment centre may be suspended from the New Zealand BQA/IHS trade until AQIS is satisfied that corrective action has been implemented and that systems are established to ensure that the nonconformance will not reocccur.

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SECTION 9. EXPORTER RESPONSIBILITIES

9.1 Registration Requirements

All exporters of BQA/IHS products to New Zealand must be registered with AQIS for this purpose. Exporter applications will be made to the AQIS State Office where the exporter's business is conducted.

Applications for registration will include details of the commodities and treatment pathways (where it is known) that the exporter intends to use to meet with the conditions stipulated for export of those commodities to New Zealand.

If details of treatment centres are not known at the time when an application for registration is made, AQIS will accept the application, but exports of the particular commodities will not be permitted until the exporter provides AQIS with the details of the treatment centres for those commodities covered in the application for registration.

9.2 Exporter Responsibilities

Whilst exporters can delegate some duties, the exporter will remain responsible for all activities which pertain to the inspection, security and loading of product following treatment.

Exporters must ensure at all times:

. either directly or by delegation, that product security during loading, transporting and export consignment consolidation is not compromised and that there can be no substitution or cross infestation of product following treatment,

. that exporters inspection requirements (either exporter or exporter delegate) as detailed in this Manual are performed by staff that are qualified to do so, and that records are kept for all inspections performed,

. that inspection records are given for each grower line presented for AQIS inspection,

. that liaison with AQIS/State Officers takes place as necessary to advise of product movement and inspection requirements,

. all documentation, including phytosanitary certificate endorsements that are required for product to enter New Zealand, are maintained.

9.3 Exporter Inspection

Where grower line inspections are performed by the exporter, full details of the inspection performed will be recorded.

NOTE: all exporter inspections must be undertaken at an appropriate sampling rate, as given in Section 2 of this manual.

Exporters will ensure that all staff undertaking inspection duties are properly trained in pest and weed seed identification for the pests and weedseeds which are of a quarantine concern to New Zealand.

During exporter inspections, any soft, bruised or rot spot fruits will be cut to determine if the fruits/vegetables contain evidence of fruit fly infestation, and if so, that all larvae are dead. The results of all fruits which are cut will be recorded on the inspection sheets.

A copy of the "Inspection Record" together with other documentation relating to the shipment will be held on file for 2 years and be subject to AQIS/MAF audit.

9.4 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections, exporters can elect to have 'consignment' inspection performed by AQIS even if the 'consignment' is to be split to varying destinations and at differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any that may not have been forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

Each such procedure must have AQIS approval before implementation.

NOTE: the "split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has approved that the necessary documentation and record keeping is satisfactory and auditable.

For split consignments where exporters/importers want to reduce the MAF on arrival inspection, exporters must adopt a system which fully documents the procedures to be used for managing such consignments. Any procedure must include:

. notification of consignment details to MAF as they occur,

. the New Zealand communication links (importer and MAF contacts),

. flow chart detailing how the phytosanitary certificate moves through the system.

9.5 Untreated Produce being forwarded from Country Areas

Growers/Packinghouses who are forwarding untreated Risk Group 2 fruits from regions outside the place where treatment will be given, will obtain an EX 186 (Transfer of prescribed goods certificate, signed by an authorised AQIS officer), or a signed copy of an EX 28 Notice of Intention to Export or, a grower declaration form, attesting that the produce has been grown and packed in accordance with the conditions and restrictions of the New Zealand BQA and the contents of this Manual.

Exporters will provide Notice of Intention to Export (EX 28) and any other relevant documentation to AQIS, prior to any AQIS inspection being undertaken.

9.6 Delegation of Inspection

Where responsibility for the export inspection is delegated to another party, this will be done in writing with the delegate acknowledging in writing, their responsibilities in so accepting the delegation. Copies of documentation for delegation and acceptance of these duties will be held on both companies filing systems.

Where the exporter has delegated the exporter inspection requirements, the delegated inspection person will perform individual 600 unit (or equivalent) consignment line inspections regardless of any "in-line quality control" inspections that may have been undertaken and recorded.

NOTE: accredited AQIS CA establishments are not required to undertake end-point inspections where their quality systems give procedures for a 600 unit inspection to be completed in-line and where the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

Any person/s who are delegated the responsibility for undertaking exporter inspections must have the ability to identify those pests and weedseeds that are of a quarantine concern to New Zealand.

All inspections, whether by exporter staff or delegated persons, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10 where appropriate.

Inspection procedures must include cutting of damaged fruits as detailed at Section 9.3 of this Manual. Records of all fruits/vegetables cut will be recorded on the inspection sheets.

All inspections performed by an exporter or delegated persons will be recorded on an "Inspection Record" and held on file by that exporter/delegate. A copy of this record must be presented with the line for AQIS inspection.

9.7 Documentation

The identity of the exporter, in addition to the grower and packinghouse numbers, will be included on all packages covered by the BQA/IHS.

A declaration to this effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28) or EX 222 or if appropriate EX186 as follows:

"The (commodity) covered by this Notice of Intention has been inspected on a grower line basis (or equivalent), for those quarantine pests categorised by New Zealand MAF and the tolerance for infested fruits has not been exceeded."

It is important that all phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX 28, and the phytosanitary certificate is given the EX 28 number, a different suffix must be added to the phytosanitary certificate number for each consignment subsequent to the first.

Where an export consignment is drawn from several EX 28, the phytosanitary number used should be that of the EX 28 from which the greatest volume of product was sourced. A suffix will be added to that number if consignments have been exported from this line previously. Only this number will be printed in the phytosanitary certificate number box.

If additional EX 28 numbers are required for traceability, these must be placed below the phytosanitary cetificate number box, in a manner that will ensure these numbers cannot be mistaken for the phytosanitary number.

9.8 Procedures for Exporter Rejected Produce

If live fruit fly is found during an exporter or exporter's delegate inspection of any grower line, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other New Zealand BQA produce, and will be identified as not suitable for export to New Zealand.

The exporter or exporter's delegate is responsible for immediately notifying the AQIS officers in the region of the detection, the grower involved and details of the treatment centre who performed the disinfestation treatment (for treated produce only). The exporter or exporter's delegate must also advise the AQIS officers of what action they are taking to ensure there is no cross contamination of other BQA/IHS produce.

AQIS Senior Inspector (Exports) in that State will formally advise the treatment centre of the possible treatment failure and that the centre will be suspended pending an audit of the treatment. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the detection of live fruit fly, reinstatement of the treatment centre for the New Zealand trade may be permitted.

Should during exporter inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS officers in that region of the detection. The fruit must be immediately identified as failed for export to New Zealand and segregated from all other New Zealand destined fruits/vegetables.

AQIS inspection staff must notify the grower of this produce of the failure and the grower will be placed on suspension and subject to an audit of his property to learn the reason for failure. If the audit identifies nonconformances but which can be corrected immediately, consideration will be given to allow the grower to take those corrective actions and be reinstated for the New Zealand program.

9.9 Post treatment Security

An exporter will nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- the security of cleared/treated produce whilst on their premises,
- supervision of loading and unloading of all consignments into and out of their premises signifying those consignments intended to be inspected/treated for New Zealand,
- documenting all incoming and outgoing produce that is intended to be exported under the related BQA/IHS commodities.

The exporter or the exporter's delegate will arrange appropriate transportation of cleared treated products to ensure that no cross infestation or substitution can occur for New Zealand destined produce. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of all documentation of delegation and acceptance of duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28) and is to be faxed through to the AQIS office in the originating area/location.

9.10 Security of Produce - Exporter/Freight Forwarder Premises

Treated produce, on arrival at an exporter's premise or Freight Forwarder Depot, will be inspected by AQIS officers to ensure that the security of the consignment is intact. Inspectors will ensure that the produce is in a secure/safe condition (no tearing of shrinkwrap or mesh bags). Documentation must correspond with the contents of the load, and if required, a treatment certificate must be present.

Export shipping or airfreight containers will be inspected by a freight forwarding agent or exporter for cleanliness and condition (any holes in containers will be taped over). Shipping container details, including soundness and cleanliness, will be recorded on the "Container Report Sheet" (Appendix 3.12) and signed by the Exporter/Airfreight Forwarding Agent. NOTE: it is only necessary to complete the "Container report sheet" for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

9.11 Audits - Exporters

AQIS will perform an annual audit of all exporters registered for the New Zealand program. All relevant documentation for all consignments must be made available to the AQIS authorised Officer.

9.12 Audits -Exporter's Delegate

A minimum of two audits per year will be conducted by AQIS on persons with exporter delegate responsibilities.

9.13 Exporter/Exporter Delegate - Non Compliance

An exporter/exporter delegate may be suspended from the New Zealand program if they are not meeting their obligations under the BQA/IHS. Non-compliance includes:

. failing to provide up to date and correct documentation, including Inspection Records for New Zealand destined product
. failing to correctly draw and sample product
. failing to appropriately train (or be trained), Quality Control inspectors for the purposes of inspecting BQA/IHS product
. failing to segregate BQA/IHS treated/passed for export product from non treated product
. failing to fulfil any other requirement/responsibility as outlined in this section of the Manual.

Additional audits (scheduled by the Senior Inspector (Exports)) will be scheduled where an audit reveals non-conformities occurring within the exporter/exporter delegate responsibilities

The exporter/exporter delegate audit costs will be charged to the exporter that the personnel are accredited with unless another satisfactory arrangement is made between AQIS and the parties involved.

SECTION 10. FRUIT FLY AREA FREEDOM - STATE DEPARTMENTS OF AGRICULTURE (OR EQUIVALENTS) RESPONSIBILITIES

10.1 Fruit Fly Area Freedom - Management Requirements

10.1.1 Area Freedom - Fruit Flies

For the purpose of the BQA/IHS Arrangement, area freedom from fruit flies is recognised as a treatment. All components of the appendices under the Arrangement are applicable to produce grown in areas free of fruit flies with the treatment being area freedom rather than fumigation, cold disinfestation, etc. Areas considered to be free of fruit flies, unless a current outbreak is declared in the area are;

. Tasmania
. Riverland area of South Australia surrounding the towns/cities of Murtho Renmark, Loxton, Berri, Barmera, Waikerie, Cadell and the township of Mypolonga.
. Sunraysia District of Victoria surrounding the towns/cities of Mildura, Merbein, Nangiloc/Colignan, Robinvale, Nyah and Nyah West, Swan Hill and Barham
. Sunraysia districts of New South Wales surrounding the towns of Dareton, Curlwaa and Coomealla,
. Murrumbidgee Irrigation Area of New South Wales including the towns/cities of Griffith, Leeton and Hillston.

10.1.2 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Surveys to demonstrate that the areas are fruit fly free.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of Fruit Flies and managed under the Tri-state agreement between the States of New South Wales, Victoria and South Australia and

  - which reflect the requirements of New Zealand NASS Standard 158.03.06., the Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

  - management and control procedures for each area which have been submitted to and accepted by MAF as meeting all the requirements (or equivalence) with the New Zealand NASS Standard 158.03.06.

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. These procedures and controls are documented such that they can be readily demonstrated to, and audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

10.1.3 Outbreak

Area freedom will be assumed, unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. one or more larvae or pupae are found in locally grown fruit, or
. two male fruit flies are trapped within 400 metres of each other, within a 14-day period, or
. a single female fly is trapped.

In this case, area freedom from fruit flies will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of NASS Standard 158.03.06, the suspension period will be reduced to;

  - one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site or 30kms should there be two outbreak sites within 3 kms.

State Departments must advise AQIS Canberra Office of any amendments to their management procedures immediately they are intended to be implemented. Canberra Office will forward amendments to these management documents to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (and at least annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable New Zealand NASS Standard 158.03.06.

This Manual at Appendix 2 lists dates of declaration of outbreaks and corresponding generation dates to assess subsequent reinstatement of area freedom for areas which are subjected to outbreak conditions.

10.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom from fruit flies has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency of all traps will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

SECTION 11. TABLEGRAPE FUMIGATION REQUIREMENTS - TREATMENT FOR DISINFESTATION OF REDBACK SPIDERS

11.1 Redback Spiders - *Lactrodectus hasselti*

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern, and have requested MAF to ensure that all consignments of tablegrapes arriving in New Zealand do not have any live pests of this type.

MAF have directed that AQIS must undertake either stringent field control programs to eliminate this pest in the field or undertake an agreed treatment that is effective against red back spiders. A sulphur dioxide - carbon dioxide fumigation treatment has been accepted for this purpose.

The Australian tablegrape industry have opted for mandatory fumigation.

11.2 Treatment details

The mandatory fumigation treatment for redback spiders is a **mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes**.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

Fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Section 3 of this Manual details the requirements and responsibilities which fumigation treatment centres must comply with, and fumigation applied to tablegrapes must meet the listed criteria.

For the phytosanitary certification of tablegrapes, AQIS inspection staff must sight fumigation treatment records. These records must clearly identify the product treated, the date of treatment and the dosage rate and application time of the fumigant. The records must also provide exporter details (where known) packing establishment and grower number details.

Tablegrape fumigators will be audited for compliance with this Section and Section 3 of this Manual.

11.3 Traceability

In the event that a live red back spider is detected in export table grapes, either during exporter, AQIS or MAF inspection, a system must be in place by which that consignment can be traced back to an individual fumigation treatment.

The choice of system is at the packinghouse/treatment centre's discretion. AQIS suggests that packinghouses/treatment centres implement a pallet card system in which a time/date is recorded on the pallet card which correlates with the treatment time/date.

In the event that produce is drawn from a number of fumigation batches to make up a pallet, each block of cartons must be identified on the pallet so as traceback to individual fumigations can be undertaken.

11.4 Additional precautionary measures

In general, packaging used for table grape exports has a high turnover rate. Unused packaging carried over to the following season, however, presents an additional pathway for the introduction of red back spiders into New Zealand. It is therefore necessary to ensure that packaging carried over to the following season does not present a higher level of risk of introducing red back spiders into New Zealand than the table grapes they contain.

Accordingly, measures must be implemented that will ensure the risk of red back spider introduction into New Zealand is minimised. When carrying unused table grape packaging over to the following season, either pest-proofing or disinfestation of the packaging is necessary. AQIS recommends that packaging is pest-proofed, preferably by means of shrink-wrapping, to prevent infestation by red back spiders.

Should pest-proofing of carried over packaging not be a viable option, disinfestation of the packaging prior to export must be undertaken. The accepted treatment, by New Zealand, for red back spiders is a mixed fumigation treatment of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes. Carried over packaging must therefore be subject to this treatment before table grape packaging. In this situation, all requirements for table grape fumigations must be met for table grape packaging (that is, all documentation must be completed).

At the beginning of the table grape season, AQIS staff will randomly check that packinghouses are implementing these requirements.

APPENDIX 1 NEW ZEALAND PEST LIST – BQA COMMODITIES

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

Growers and packinghouses must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

-
-
-
avocado sun blotch viroid

1.1 Avocado, *Persea americana*

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	

Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Mite

Arachnida
Acarina

Tetranychidae
Oligonychus coffeae tea red spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Mite	
Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

1.1 Avocado, *Persea americana*

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	-

Non-regulated non plant pests/organisms

None

BANANA
Musa spp.

The export of Bananas to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera jarvisi	Javis' fruit fly
Bactrocera papayae	papaya fruit fly
Bactrocera tryoni	Queensland fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) are allowed as corrective action.

Insecta	
Coleoptera	
Chrysomelidae	
Geloptera miracula	chrysomelid beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida discopunctulata	leaf beetle
Curculionidae	
Cosmopolites sordidus	banana root borer
Listroderes difficilis	vegetable weevil
Polytus mellerborgi	weevil borer
Scarabaeidae	
Dermolepida albohirtum	greyback cane beetle
Rhopaea magnicornis	large pasture scarab
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Calliphoa imperialis	blow fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug

Dasynus fuscescens	fruit-spotting bug
Fabrictilis australis	squash bug
Lygaeidae	
Graptostethus servus	lygaeid bug
Homoptera	
Aleyrodidae	
Aleurodicus spiniferis	coconut whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Abgrallaspis cyanophyllis	cyanophyllum scale
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Pseudococcidae	
Planococcus pacificus	citrus mealybug
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Lepidoptera	
Lymantriidae	
Orgyia australis	vapourer moth
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Helicoverpa assulta	cape gooseberry budworm
Hermimia cenoealis	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Lamprosema octasema	banana scab moth
Tirathaba rufivena	fruit borer
Tineidae	
Opogona glycyphaga	sugarcane bud moth
Torticidae	
Isotenes miserana	orange fruitborer
Xenothictis sciaphila	tortricid
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Thysanoptera	
Thripidae	
Chaetanaphothrips signipennis	banana rust thrips
Thrips florum	flower thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phyllocoptruta musae	eriophyid mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Tetranychus marianae	bean mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia musae (anamorph *Phyllostict musae)*	-
Phyllachorales	
Phyllachoraceae	
Phyllachora musicola	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis musicola	-
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora hayi	-
Deightoniella torulosa	-
Moniliaceae	
Verticillium theobromae	-
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora palmivora	phytophthora fruit rot

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Insect
- **Insecta**
  - **Coleoptera**
    - **Scarabaeidae**
      - *Heteronychus arator* — black beetle
  - **Homoptera**
    - **Coccidae**
      - *Coccus hesperidum* — brown soft scale
    - **Diaspididae**
      - *Aspidiotus nerii* — oleander scale
      - *Hemiberlesia lataniae* — latania scale
      - *Pinnaspis aspidistrae* — fern scale
    - **Pseudococcidae**
      - *Planococcus citri* — citrus mealybug
  - **Lepidoptera**
    - **Noctuidae**
      - *Chrysodeixis eriosoma* — green garden looper
      - *Spodoptera litura* — cluster caterpillar
  - **Thysanoptera**
    - **Thripidae**
      - *Hercinothrips bicinctus* — banana silvering thrips

Mite
- **Arachnida**
  - **Acarina**
    - **Tarsonemidae**
      - *Polyhagotarsonemus latus* — broad mite
    - **Tenuipalpidae**
      - *Brevipalpus californicus* — bunch mite
      - *Brevipalpus phoenicis* — passionvine mite
    - **Tetranychidae**
      - *Tetranychus lambi* — strawberry spider mite
      - *Tetranychus urtiae* — twospotted spider mite

Fungus
- **Ascomycota**
  - **Microascales**
    - **Unknown Microascales**
      - *Ceratocystis paradoxa* (anamorph *Chalara paradoxa*)
  - **Unknown Ascomycota**
    - **Magnaporthaceae**
      - *Magnaporthe grisea* (anamorph *Pyriculara grisea*)

Non-regulated non plant pests/organisms

None

CAPSICUM

Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the BQA/IHS**
- **Appendices 4 (dimethoate treatment) and 10 (field control programmes) to the BQA/IHS.**

A number of Risk Group 2 pests are listed for capsicums, and AQIS can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the BQA) would also control *B. bryoniae* should it occur.
4. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the BQA) would also control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. If by chance *B. tabaci* were present on harvested capsicum fruit as a hitch-hiker, the pre-export dimethoate spray treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
5. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
6. Historical records show that *B. tabaci* has never been detected on capsicum fruit during AQIS pre-export inspection.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested capsicum fruit, the pre-export dimethoate spray treatment (appendix 4 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on capsicum fruit during AQIS pre-export inspection.

Monilinia fructigena

1. This fungi does not occur in Australia.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
*Bactrocera kraussi**	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci [vect.]	-
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

1.3 Capsicum, *Capsicum annuum*

Fungus

Ascomycota
Leotiales
Sclerotiniaceae

Monilinia fructigena (anamorph *Monilia fructigena*)	European brown rot

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta
Coleoptera
Coccinellidae

Epilachna vigintioctopunctata	28-spot ladybird

Curculionidae

Listroderes difficilis	vegetable weevil

Tenebrionidae

Gonocephalum carpentariae	false wireworm

Diptera
Muscidae

Atherigona orientalis	muscid fly

Tephritidae

Dirioxa pornia	island fruit fly

Hemiptera
Lygaeidae

Nysius vinitor	Rutherglen bug

Pentatomidae

Plautia affinis	green stink bug

Pyrrhocoridae

Dindymus versicolor	harlequin bug

Rhopalidae

Leptocoris mitellatus	leptocoris bug

Homoptera
Aleyrodidae

Aleurodicus dispersus	spiralling whitefly
Trialeurodes vaporariorum [strain]	greenhouse whitefly

Cicadellidae

Austroasca viridigrisea	vegetable leafhopper

Coccidae

Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale

Diaspididae

Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale

Margarodidae

Icerya seychellarum	Seychelles scale

Pseudococcidae

Dysmicoccus brevipes	pineapple mealybug

1.3 Capsicum, *Capsicum annuum*

Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Nectria haematococca var. *brevicona*	dry rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata f. sp. *lycopersici*	-
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *vasinfectum*	fusarium wilt
Pythiales	
Pythiaceae	
Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak
Virus	
-	
-	
-	
tobacco leaf curl bigeminivirus [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-
Weed	
Angiospermae	

1.3 Capsicum, *Capsicum annuum*

Asterales	
Asteraceae	
Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf
Xanthium spp. (except *X. spinosum*)	bur
Caryophyllales	
Amaranthaceae	
Amaranthus spp.	amaranthus
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Listroderes costirostris	vegetable weevil
Listroderes obliquus	vegetable weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Myzus persicae	green peach aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Pyralidae	
Sceliodes cordalis	poroporo fruit borer
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculops lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

1.3 Capsicum, *Capsicum annuum*

Fungus

Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli*)	phomopsis stem rot
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease

1.3 Capsicum, *Capsicum annuum*

Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phoma destructiva	bulb rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Bacterium	
-	
-	
Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	

1.3 Capsicum, *Capsicum annuum*

Agrobacterium tumefaciens	crown gall

Weed
Angiospermae
Asterales
Asteraceae

Galinsoga parviflora	
Sonchus spp.	sowthistle

Poales
Poaceae

Echinochloa spp.	grasses
Eleusine indica	goose grass
Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

1.4 Citrus, *Citrus* spp.

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly

Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer

Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite

Tetranychidae

Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth

1.4 Citrus, *Citrus* spp.

Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non plant pests/organisms

None

CUCUMBER

Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme),**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for cucumbers. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested cucumber fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested cucumber fruit, the pre-export dimethoate dip treatment (appendix 8 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Cucumbers exported to New Zealand under appendix 4 and 10 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

1.5 Cucumber, *Cucumis sativus*

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm

1.5 Cucumber, *Cucumis sativus*

Orthoptera	
Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Fungus	
Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cladosporium cucumerinum	--
Moniliaceae	
Verticillium albo-atrum [severe strain]	progressive wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--

1.5 Cucumber, *Cucumis sativus*

Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight
Virus	
-	
-	
-	
tobacco ringspot nepovirus [strain] [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould

1.5 Cucumber, *Cucumis sativus*

Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	

1.5 Cucumber, *Cucumis sativus*

Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

GRAPE

Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Growers and packinghouses must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk Group 2 pests Conogethes punctiferalis. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

1.6 Grape, *Vitis vinifera*

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample.
Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug

Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail
Fungus	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	-
Coniella diplodiella	white rot

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria vitis	leaf disease
Cladosporium viticola	cladosporium leaf spot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except *X. spinosum*) [contaminant]	bur
Geraniales	
Zygophyllaceae	
Tribulus terrestris [contaminant]	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae
Latrodectus hasselti Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite
Arachnida
Acarina
Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tenuipalpidae

Brevipalpus californicus	bunch mite

Tetranychidae

Panonychus ulmi	European red mite
Tetranychus urticae	twospotted spider mite

Mollusc
Gastropoda
Stylommatophora
Helicidae

Helix aspersa	common garden snail

Fungus
Ascomycota
Diatrypales
Diatrypaceae

Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback

Dothideales
Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker

Elsinoaceae

Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose

Mycosphaerellaceae

Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot

Erysiphales
Erysiphaceae

Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew

Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	-
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	-
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	-
Digitaria violascens [contaminant]	-
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass

1.6 Grape, *Vitis vinifera*

Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	-
Pennisetum macrourum [contaminant]	African feather grass
Solanales	
Solanaceae	
Lycium barbarum [contaminant]	boxthorn
Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

MANGO
Mangifera indica

The export of Mango to New Zealand is prohibited at this time.
Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Ceroplastes rubens	red wax scale
Diaspididae	
Aspidiotus destructor	coconut scale
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Ischnaspis longirostris	black thread scale
Phenacaspis dilatata	mango scale
Flatidae	
Colgaroides acuminata	mango planthopper
Lepidoptera	
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Penicillaria jocosatrix	mango shoot caterpillar
Peperita euthysticha	mango tipborer
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Regulated non-quarantine pests

None

Regulated non-plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Sternochetus mangiferae	mango seed weevil
Homoptera	
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite

Non-regulated non plant pests/organisms

None

MELON

Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Pest Scientific Name	Common Name
Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments	
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly
Quarantine: Risk group 2 pests (actionable) - Management Control Systems	
Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite
Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.	
Insect	
Insecta	

1.8 Melon, *Cucumis melo*

Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid

Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Fungus	
Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	-

Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight
Bacterium	
-	
-	
Pseudomonadaceae	
Acidovorax avenae subsp. *citrulli*	bacterial rot
Virus	
-	
-	
-	
tobacco ringspot nepovirus [strain] [VO]	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus	
Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata (anamorph *Fusarium lateritium*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	

Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot
Bacterium	

-

-

Pseudomonadaceae

Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

PAPAYA
Carica papaya

The export of Papaya to New Zealand is prohibited at this time.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha suspensa	Caribbean fruit fly
Bactrocera cucurbitae	melon fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Homoptera	
Cicadellidae	
Orosius argentatus	brown leafhopper
Diaspididae	
Aonidiella orientalis	oriental yellow scale
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Mite

Arachnida	
Acarina	
Tetranychidae	
Tetranychus desertorum	desert spider mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus phoenicis	passionvine mite

Non-regulated non plant pests/organisms

None

PINEAPPLE

Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarnatine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale
Pseudococcidae	

Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla	
Unknown Symphyla	
Symphylidae	
Hanseniella sp.	symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetes	
Dematiaceae	
Thielaviopsis paradoxa	
Moniliaceae	
Penicillium funiculosum	

Bacterium

-	
-	
Enterobacteriaceae	
Erwinia ananas	marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae

Iridomyrmex glaber	black house ant
Paratrechina vaga	ant
Tapinoma sp.	ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin's flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps
Mite	
Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite
Nematode	
Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	

Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus

-	
-	
-	
tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	**Common Name**
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

POMEGRANATE

Punica granatum

Pomegranates are not permitted export to New Zealand at this time.

Growers and packinghouses of pomegranate do not need to be specifically registered for the New Zealand program requirements.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Hemiptera	
Lygaeidae	
Oxycarenus arctatus	coon bug
Homoptera	
Aphididae	
Aphis spiraecola	spirea aphid

Lepidoptera
Pyralidae
Ectomyelois sp. carob moth

Reglulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Aphididae	
Aphis gossypii	cotton aphid
Aulacorthum circumflexum	mottled arum aphid
Myzus ornatus	ornate aphid
Myzus persicae	green peach aphid
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus spp.	spider mites

Non-regluated non plant pests/organisms

None

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil

Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

1.12 Strawberry, *Fragaria* spp.

Myriapod

Diplopode
Julida
Blaniulidae

Blaniulua guttulatus	spotted snake millipede

Mollusc

Gastropoda
Stylommatophora
Helicidae

Helix aspersa	common garden snail

Limacidae

Deroceras panormitanum	brown field slug
Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and 10 (field control programmes)**

Only the tomato varieties, Floradade, Tristar, Hayslip, Sunny and Duke can be exported under the Dimethoate Treatment Appendix No. 4 to the BQA/IHS. Growers and packhouses that are growing/packing tomatoes for export to New Zealand under appendix 4 to the BQA must be registered for this purpose.

Tomatoes supplied under the Area Freedom Treatment Appendix No.2 of the BQA/IHS can be of any variety, but the variety name should be included on the phytosanitary certificate.

A number of Risk Group 2 pests have been listed for tomatoes. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested tomato fruit as a hitch-hiker, the pre-export dimethoate spray/dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on tomato fruit during AQIS pre-export inspection.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested tomato fruit, the pre-export dimethoate spray/dip treatment (appendix 4 to the BQA) would disrupt/dislodge and possibly kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on tomato fruit during AQIS pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export application of dimethoate spray to tomatoes (appendix 4 to the BQA) would also control *B. musae* should it occur.
4. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. musae* has never been detected on tomato fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

1.13 Tomato, *Lycopersicon esculentum*

Insect

Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	
Antherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm

1.13 Tomato, *Lycopersicon esculentum*

Thysanoptera
Thripidae

Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips

Fungus

Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak

Virus

-
-
-

tobacco ringspot nepovirus [strain] [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Phytoplasma

-
-
-

tomato big bud phytoplasma	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Mite	
Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

1.13 Tomato, *Lycopersicon esculentum*

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot

1.13 Tomato, *Lycopersicon esculentum*

Zygomycota: Zygomycetes
Mucorales
Mucoraceae

Rhizopus stolonifer	rhizopus soft rot

Non-regulated non plant pests

None

WATERMELON
Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for watermelons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. *T. palmi* is only known to occur in the Northern Territory.
2. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the BQA) would kill the animal.
3. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 2 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the BQA. It is felt however, that items 1, 3, and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

1.14 Watermelon, *Citrullus lanatus*

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	

Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta spp.	-
Phomopsis cucurbitae	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium spp.	pythium rot

Bacterium

-	
-	
Enterobacteriaceae	
Erwinia tracheiphila	bacterial wilt
Pseudomonadaceae	
Acidovorax avenae subsp. *citrulli*	bacterial rot

1.14 Watermelon, *Citrullus lanatus*

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta
Hymenoptera
Formicidae
Solenopsis geminata fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida

1.14 Watermelon, *Citrullus lanatus*

Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite
Fungus	
Ascomycota	
Dothideales	
Pleosporaceae	
Leptosphaerulina trifolii	seed rot
Unknown Dothideales	
Didymella bryoniae	cucumber stem rot
(anamorph *Phoma cucurbitacearum*)	
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum	powdery mildew
(anamorph *Oidium asteris-punicei*)	
Hypocreales	
Hypocreaceae	
Nectria haematococca	fusarium fruit rot
(anamorph *Fusarium solani*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	grey mould
(anamorph *Botrytis cinerea*)	
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata	bitter rot
(anamorph *Colletotrichum gloeosporioides*)	
Glomerella lagenaria	--
(anamorph *Colletotrichum orbiculare*)	

1.14 Watermelon, *Citrullus lanatus*

Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phoma exigua	phoma rot
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Bacterium	
-	
-	
Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI

Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip)**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for zucchinis and scallopinis. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested zucchini fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on zucchini fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to zucchini and scallopini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 11(winter window) to the BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Zucchinis exported to New Zealand under Appendix 4 to the BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Promecotheca bryanti	-
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Graphognathus peregrinus	weevil

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Pseudaulacaspis pentagona	white peach scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Tiracola plagiata	banana fruit caterpillar
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Bryobia spp.	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Hyphomycetes)	
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Virus

-	
-	
-	
tobacco ringspot nepovirus [strain] [VO]	-

Phytoplasma

-	
-	
-	
tomato big bud phytoplasma	-

Regulated non-quarantine pests

None

Regulated non plant pests

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Insect

Insecta
Hymenoptera
Formicidae
Solenopsis geminata fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Stratiomyidae	
Inopus rubriceps	Australian soldier fly
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Diaspididae	
Aspidiotus nerii	oleander scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Heliothrips haemorrhoidalis	greenhouse thrips
Parthenothrips dracaenae	palm thrips

Mite

Arachnida
Acarina
Acaridae

Tyrophagus putrescentiae	mould mite

Eupodidae

Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tetranychidae

Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Unknown Dothideales

Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot

Erysiphales
Erysiphaceae

Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew

Hypocreales
Hypocreaceae

Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould

1.15 Zucchini & Scallopini, *Cucurbita pepo*

Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Microascales	
Unknown Microascales	
Ceratocystis paradoxa (anamorph *Chalara paradoxa*)	ceratocystis rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt

Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Ralstonia solanacearum	bacterial wilt
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

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1.15 Zucchini & Scallopini, *Cucurbita pepo*

APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSIA DISTRICT

DAY LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	01 - Feb	01 - Mar	05 - Mar	27 - Apr
02 - Jan	02 - Feb	02 - Mar	06 - Mar	03 - May
03 - Jan	03 - Feb	03 - Mar	07 - Mar	05 - May
04 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
05 - Jan	04 - Feb	04 - Mar	08 - Mar	14 - May
06 - Jan	05 - Feb	05 - Mar	09 - Mar	16 - May
07 - Jan	06 - Feb	06 - Mar	11 - Mar	19 - Sep
08 - Jan	07 - Feb	07 - Mar	13 - Mar	25 - Sep
09 - Jan	08 - Feb	08 - Mar	14 - Mar	30 - Sep
10 - Jan	09 - Feb	09 - Mar	16 - Mar	02 - Oct
11 - Jan	10 - Feb	10 - Mar	17 - Mar	04 - Oct
12 - Jan	11 - Feb	11 - Mar	18 - Mar	06 - Oct
13 - Jan	12 - Feb	12 - Mar	19 - Mar	08 - Oct
14 - Jan	13 - Feb	13 - Mar	20 - Mar	10 - Oct
15 - Jan	14 - Feb	14 - Mar	21 - Mar	11 - Oct
16 - Jan	15 - Feb	15 - Mar	23 - Mar	11 - Oct
17 - Jan	16 - Feb	16 - Mar	25 - Mar	12 - Oct
18 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
19 - Jan	17 - Feb	17 - Mar	27 - Mar	14 - Oct
20 - Jan	19 - Feb	19 - Mar	30 - Mar	18 - Oct
21 - Jan	20 - Feb	20 - Mar	02 - Apr	23 - Oct
22 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
23 - Jan	21 - Feb	21 - Mar	03 - Apr	24 - Oct
24 - Jan	23 - Feb	23 - Mar	04 - Apr	25 - Oct
25 - Jan	24 - Feb	24 - Mar	07 - Apr	28 - Oct
26 - Jan	25 - Feb	25 - Mar	09 - Apr	29 - Oct
27 - Jan	26 - Feb	26 - Mar	11 - Apr	31 - Oct
28 - Jan	27 - Feb	27 - Mar	12 - Apr	01 - Nov
29 - Jan	28 - Feb	28 - Mar	14 - Apr	02 - Nov
30 - Jan	02 - Mar	30 - Mar	17 - Apr	04 - Nov
31 - Jan	03 - Mar	31 - Mar	21 - Apr	07 - Nov
01 - Feb	04 - Mar	01 - Apr	23 - Apr	08 - Nov
02 - Feb	05 - Mar	02 - Apr	27 - Apr	10 - Nov
03 - Feb	06 - Mar	03 - Apr	03 - May	13 - Nov
04 - Feb	07 - Mar	04 - Apr	05 - May	13 - Nov
05 - Feb	08 - Mar	05 - Apr	14 - May	15 - Nov
06 - Feb	09 - Mar	06 - Apr	16 - May	16 - Nov
07 - Feb	11 - Mar	08 - Apr	19 - Sep	23 - Nov
08 - Feb	13 - Mar	10 - Apr	25 - Sep	25 - Nov
09 - Feb	14 - Mar	11 - Apr	30 - Sep	27 - Nov

2.1 Sunraysia district

10 - Feb	16 - Mar	13 - Apr	02 - Oct	28 - Nov
11 - Feb	17 - Mar	14 - Apr	04 - Oct	29 - Nov
12 - Feb	18 - Mar	15 - Apr	06 - Oct	29 - Nov
13 - Feb	19 - Mar	16 - Apr	08 - Oct	30 - Nov
14 - Feb	20 - Mar	17 - Apr	10 - Oct	01 - Dec
15 - Feb	21 - Mar	18 - Apr	11 - Oct	02 - Dec
16 - Feb	23 - Mar	20 - Apr	11 - Oct	02 - Dec
17 - Feb	25 - Mar	22 - Apr	12 - Oct	02 - Dec
18 - Feb	27 - Mar	24 - Apr	14 - Oct	03 - Dec
19 - Feb	28 - Mar	25 - Apr	14 - Oct	03 - Dec
20 - Feb	30 - Mar	27 - Apr	18 - Oct	05 - Dec
21 - Feb	02 - Apr	30 - Apr	23 - Oct	07 - Dec
22 - Feb	03 - Apr	01 - May	24 - Oct	09 - Dec
23 - Feb	04 - Apr	02 - May	25 - Oct	09 - Dec
24 - Feb	04 - Apr	02 - May	25 - Oct	09 - Dec
25 - Feb	07 - Apr	05 - May	28 - Oct	11 - Dec
26 - Feb	09 - Apr	07 - May	29 - Oct	11 - Dec
27 - Feb	11 - Apr	09 - May	31 - Oct	13 - Dec
28 - Feb	12 - Apr	10 - May	01 - Nov	14 - Dec
01 - Mar	14 - Apr	12 - May	02 - Nov	14 - Dec
02 - Mar	15 - Apr	13 - May	03 - Nov	14 - Dec
03 - Mar	17 - Apr	15 - May	04 - Nov	15 - Dec
04 - Mar	21 - Apr	19 - May	07 - Nov	17 - Dec
05 - Mar	23 - Apr	21 - May	08 - Nov	18 - Dec
06 - Mar	27 - Apr	25 - May	10 - Nov	19 - Dec
07 - Mar	03 - May	31 - May	13 - Nov	22 - Dec
08 - Mar	05 - May	02 - Jun	13 - Nov	22 - Dec
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13 - Mar	24 - Sep	22 - Oct	25 - Nov	31 - Dec
14 - Mar	25 - Sep	23 - Oct	25 - Nov	31 - Dec
15 - Mar	30 - Sep	28 - Oct	27 - Nov	01 - Jan
16 - Mar	30 - Sep	28 - Oct	27 - Nov	01 - Jan
17 - Mar	02 - Oct	30 - Oct	28 - Nov	02 - Jan
18 - Mar	04 - Oct	01 - Nov	29 - Nov	03 - Jan
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31 - Mar	18 - Oct	15 - Nov	05 - Dec	09 - Jan
01 - Apr	20 - Oct	17 - Nov	06 - Dec	10 - Jan
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04 - Apr	24 - Oct	21 - Nov	09 - Dec	11 - Jan

2.1 Sunraysia district

05 - Apr	25 - Oct	22 - Nov	09 - Dec	11 - Jan
06 - Apr	26 - Oct	23 - Nov	09 - Dec	11 - Jan
07 - Apr	27 - Oct	24 - Nov	10 - Dec	12 - Jan
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11 - Apr	30 - Oct	27 - Nov	12 - Dec	14 - Jan
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27 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
28 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan

2.1 Sunraysia district

29 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
30 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
31 - Aug	19 - Nov	17 - Dec	27 - Dec	29 - Jan
01 - Sep	19 - Nov	17 - Dec	27 - Dec	29 - Jan
02 - Sep	19 - Nov	17 - Dec	27 - Dec	29 - Jan
03 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
04 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
05 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
06 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
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08 - Sep	20 - Nov	18 - Dec	28 - Dec	29 - Jan
09 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
10 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
11 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
12 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
13 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
14 - Sep	21 - Nov	19 - Dec	29 - Dec	30 - Jan
15 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
16 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
17 - Sep	22 - Nov	20 - Dec	29 - Dec	30 - Jan
18 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
19 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
20 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
21 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
22 - Sep	23 - Nov	21 - Dec	29 - Dec	30 - Jan
23 - Sep	24 - Nov	22 - Dec	30 - Dec	31 - Jan
24 - Sep	24 - Nov	22 - Dec	30 - Dec	31 - Jan
25 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
26 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
27 - Sep	25 - Nov	23 - Dec	31 - Dec	01 - Feb
28 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
29 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
30 - Sep	26 - Nov	24 - Dec	31 - Dec	01 - Feb
01 - Oct	27 - Nov	25 - Dec	01 - Jan	02 - Feb
02 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
03 - Oct	28 - Nov	26 - Dec	02 - Jan	03 - Feb
04 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
05 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
06 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
07 - Oct	29 - Nov	27 - Dec	03 - Jan	04 - Feb
08 - Oct	30 - Nov	28 - Dec	05 - Jan	05 - Feb
09 - Oct	30 - Nov	28 - Dec	05 - Jan	05 - Feb
10 - Oct	01 - Dec	29 - Dec	06 - Jan	06 - Feb
11 - Oct	01 - Dec	29 - Dec	06 - Jan	06 - Feb
12 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb
13 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb
14 - Oct	03 - Dec	31 - Dec	07 - Jan	07 - Feb
15 - Oct	03 - Dec	31 - Dec	07 - Jan	07 - Feb
16 - Oct	04 - Dec	01 - Jan	08 - Jan	08 - Feb
17 - Oct	04 - Dec	01 - Jan	08 - Jan	08 - Feb
18 - Oct	05 - Dec	02 - Jan	09 - Jan	09 - Feb
19 - Oct	05 - Dec	02 - Jan	09 - Jan	09 - Feb
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21 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb

2.1 Sunraysia district

22 - Oct	06 - Dec	03 - Jan	10 - Jan	10 - Feb
23 - Oct	07 - Dec	04 - Jan	10 - Jan	10 - Feb
24 - Oct	07 - Dec	04 - Jan	10 - Jan	10 - Feb
25 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
26 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
27 - Oct	09 - Dec	06 - Jan	11 - Jan	11 - Feb
28 - Oct	10 - Dec	07 - Jan	12 - Jan	12 - Feb
29 - Oct	11 - Dec	08 - Jan	13 - Jan	13 - Feb
30 - Oct	11 - Dec	08 - Jan	13 - Jan	13 - Feb
31 - Oct	12 - Dec	09 - Jan	14 - Jan	14 - Feb
01 - Nov	13 - Dec	10 - Jan	15 - Jan	15 - Feb
02 - Nov	14 - Dec	11 - Jan	16 - Jan	16 - Feb
03 - Nov	14 - Dec	11 - Jan	16 - Jan	16 - Feb
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05 - Nov	15 - Dec	12 - Jan	17 - Jan	17 - Feb
06 - Nov	16 - Dec	13 - Jan	17 - Jan	17 - Feb
07 - Nov	17 - Dec	14 - Jan	18 - Jan	17 - Feb
08 - Nov	17 - Dec	14 - Jan	18 - Jan	17 - Feb
09 - Nov	18 - Dec	15 - Jan	19 - Jan	19 - Feb
10 - Nov	19 - Dec	16 - Jan	21 - Jan	21 - Feb
11 - Nov	19 - Dec	16 - Jan	21 - Jan	21 - Feb
12 - Nov	20 - Dec	17 - Jan	22 - Jan	21 - Feb
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18 - Nov	26 - Dec	23 - Jan	28 - Jan	28 - Feb
19 - Nov	26 - Dec	23 - Jan	28 - Jan	28 - Feb
20 - Nov	27 - Dec	24 - Jan	29 - Jan	02 - Mar
21 - Nov	28 - Dec	25 - Jan	29 - Jan	02 - Mar
22 - Nov	29 - Dec	26 - Jan	30 - Jan	03 - Mar
23 - Nov	29 - Dec	26 - Jan	30 - Jan	03 - Mar
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25 - Nov	30 - Dec	27 - Jan	31 - Jan	04 - Mar
26 - Nov	31 - Dec	28 - Jan	01 - Feb	05 - Mar
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30 - Nov	03 - Jan	31 - Jan	04 - Feb	08 - Mar
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05 - Dec	08 - Jan	05 - Feb	08 - Feb	14 - Mar
06 - Dec	09 - Jan	06 - Feb	09 - Feb	16 - Mar
07 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
08 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
09 - Dec	10 - Jan	07 - Feb	10 - Feb	17 - Mar
10 - Dec	11 - Jan	08 - Feb	11 - Feb	18 - Mar
11 - Dec	12 - Jan	09 - Feb	12 - Feb	19 - Mar
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13 - Dec	14 - Jan	11 - Feb	14 - Feb	21 - Mar
14 - Dec	15 - Jan	12 - Feb	15 - Feb	23 - Mar

2.1 Sunraysia district

15 - Dec	16 - Jan	13 - Feb	16 - Feb	25 - Mar
16 - Dec	17 - Jan	14 - Feb	17 - Feb	27 - Mar
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18 - Dec	18 - Jan	15 - Feb	17 - Feb	27 - Mar
19 - Dec	19 - Jan	16 - Feb	19 - Feb	30 - Mar
20 - Dec	21 - Jan	18 - Feb	21 - Feb	03 - Apr
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23 - Dec	23 - Jan	20 - Feb	23 - Feb	04 - Apr
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25 - Dec	25 - Jan	22 - Feb	25 - Feb	09 - Apr
26 - Dec	26 - Jan	23 - Feb	26 - Feb	11 - Apr
27 - Dec	28 - Jan	25 - Feb	28 - Feb	14 - Apr
28 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
29 - Dec	29 - Jan	26 - Feb	02 - Mar	17 - Apr
30 - Dec	30 - Jan	27 - Feb	03 - Mar	21 - Apr
31 - Dec	31 - Dec	28 - Feb	04 - Mar	23 - Apr

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE RIVERLAND DISTRICT

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	03 - Feb	03 - Mar	11 - Mar	19 - Oct
02 - Jan	04 - Feb	04 - Mar	12 - Mar	19 - Oct
03 - Jan	05 - Feb	05 - Mar	13 - Mar	19 - Oct
04 - Jan	06 - Feb	06 - Mar	15 - Mar	20 - Oct
05 - Jan	07 - Feb	07 - Mar	16 - Mar	21 - Oct
06 - Jan	08 - Feb	08 - Mar	18 - Mar	24 - Oct
07 - Jan	09 - Feb	09 - Mar	19 - Mar	24 - Oct
08 - Jan	11 - Feb	11 - Mar	22 - Mar	27 - Oct
09 - Jan	12 - Feb	12 - Mar	25 - Mar	29 - Oct
10 - Jan	13 - Feb	13 - Mar	27 - Mar	31 - Oct
11 - Jan	14 - Feb	14 - Mar	30 - Mar	03 - Nov
12 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
13 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
14 - Jan	15 - Feb	15 - Mar	31 - Mar	04 - Nov
15 - Jan	16 - Feb	16 - Mar	04 - Apr	06 - Nov
16 - Jan	17 - Feb	17 - Mar	07 - Apr	09 - Nov
17 - Jan	18 - Feb	18 - Mar	09 - Apr	10 - Nov
18 - Jan	19 - Feb	19 - Mar	11 - Apr	11 - Nov
19 - Jan	20 - Feb	20 - Mar	14 - Apr	13 - Nov
20 - Jan	22 - Feb	22 - Mar	18 - Apr	16 - Nov
21 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
22 - Jan	23 - Feb	23 - Mar	21 - Apr	17 - Nov
23 - Jan	24 - Feb	24 - Mar	23 - Apr	18 - Nov
24 - Jan	25 - Feb	25 - Mar	02 - May	21 - Nov
25 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
26 - Jan	28 - Feb	28 - Mar	21 - Sep	29 - Nov
27 - Jan	01 - Mar	29 - Mar	27 - Sep	01 - Dec
28 - Jan	02 - Mar	30 - Mar	30 - Sep	02 - Dec
29 - Jan	03 - Mar	31 - Mar	02 - Oct	03 - Dec
30 - Jan	04 - Mar	01 - Apr	05 - Oct	05 - Dec
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14 - Feb	27 - Mar	24 - Apr	31 - Oct	17 - Dec
15 - Feb	30 - Mar	27 - Apr	03 - Nov	19 - Dec
16 - Feb	31 - Mar	28 - Apr	04 - Nov	20 - Dec

2.2 Riverland district

17 - Feb	04 - Apr	02 - May	06 - Nov	21 - Dec
18 - Feb	07 - Apr	05 - May	09 - Nov	23 - Dec
19 - Feb	09 - Apr	07 - May	10 - Nov	24 - Dec
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21 - Feb	14 - Apr	12 - May	13 - Nov	25 - Dec
22 - Feb	15 - Apr	13 - May	14 - Nov	26 - Dec
23 - Feb	18 - Apr	16 - May	16 - Nov	28 - Dec
24 - Feb	21 - Apr	19 - May	17 - Nov	28 - Dec
25 - Feb	23 - Apr	21 - May	18 - Nov	29 - Dec
26 - Feb	02 - May	30 - May	21 - Nov	31 - Dec
27 - Feb	05 - May	02 - Jun	22 - Nov	31 - Dec
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2.2 Riverland district

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2.2 Riverland district

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2.2 Riverland district

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2.2 Riverland district

21 - Sep	29 - Nov	27 - Dec	07 - Jan	11 - Feb
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10 - Nov	23 - Dec	20 - Jan	26 - Jan	01 - Mar
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2.2 Riverland district

14 - Nov	25 - Dec	22 - Jan	29 - Jan	04 - Mar
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23 - Dec	25 - Jan	22 - Feb	28 - Feb	21 - Sep
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25 - Dec	27 - Jan	24 - Feb	02 - Mar	30 - Sep
26 - Dec	29 - Jan	26 - Feb	04 - Mar	05 - Oct
27 - Dec	30 - Jan	27 - Feb	05 - Mar	09 - Oct
28 - Dec	31 - Jan	28 - Feb	06 - Mar	10 - Oct
29 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
30 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
31 - Dec	03 - Feb	03 - Mar	11 - Mar	19 - Oct

QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE MURRUMBIDGEE IRRIGATION AREA

DATE LAST FLY CAUGHT	1 GENERATION	1 GENERATION PLUS 28 DAYS	2 GENERATION	3 GENERATION
01 - Jan	31 - Jan	28 - Feb	10 - Mar	16 - Oct
02 - Jan	02 - Feb	02 - Mar	12 - Mar	18 - Oct
03 - Jan	03 - Feb	03 - Mar	15 - Mar	20 - Oct
04 - Jan	04 - Feb	04 - Mar	16 - Mar	22 - Oct
05 - Jan	05 - Feb	05 - Mar	17 - Mar	22 - Oct
06 - Jan	06 - Feb	06 - Mar	19 - Mar	24 - Oct
07 - Jan	07 - Feb	07 - Mar	22 - Mar	25 - Oct
08 - Jan	08 - Feb	08 - Mar	24 - Mar	27 - Oct
09 - Jan	09 - Feb	09 - Mar	27 - Mar	28 - Oct
10 - Jan	10 - Feb	10 - Mar	28 - Mar	29 - Oct
11 - Jan	11 - Feb	11 - Mar	02 - Apr	31 - Oct
12 - Jan	12 - Feb	12 - Mar	04 - Apr	01 - Nov
13 - Jan	14 - Feb	14 - Mar	10 - Apr	05 - Nov
14 - Jan	15 - Feb	15 -Mar	16 - Apr	08 - Nov
15 - Jan	16 - Feb	16 - Mar	30 - Aug	13 - Nov
16 - Jan	17 - Feb	17 - Mar	11 - Sep	15 - Nov
17 - Jan	18 - Feb	18 - Mar	15 - Sep	16 - Nov
18 - Jan	19 - Feb	19 - Mar	17 - Sep	17 - Nov
19 - Jan	20 - Feb	20 - Mar	22 - Sep	18 - Nov
20 - Jan	21 - Feb	21 - Mar	25 - Sep	20 - Nov
21 - Jan	23 - Feb	23 - Mar	30 - Sep	22 - Nov
22 - Jan	24 - Feb	24 - Mar	02 - Oct	23 - Nov
23 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
24 - Jan	27 - Feb	27 - Mar	06 - Oct	25 - Nov
25 - Jan	28 - Feb	28 - Mar	07 - Oct	25 - Nov
26 - Jan	01 - Mar	29 - Mar	07 - Oct	25 - Nov
27 - Jan	03 - Mar	31 - Mar	09 - Oct	25 - Nov
28 - Jan	04 - Mar	01 – Apr	09 – Oct	25 - Nov
29 - Jan	06 - Mar	03 - Apr	12 - Oct	27 - Nov
30 - Jan	07 - Mar	04 - Apr	13 - Oct	28 - Nov
31 - Jan	09 - Mar	06 - Apr	15 - Oct	28 - Nov
01 - Feb	10 - Mar	07 - Apr	16 - Oct	30 - Nov
02 - Feb	11 - Mar	08 - Apr	16 - Oct	30 - Nov
03 - Feb	12 - Mar	09 - Apr	18 - Oct	02 - Dec
04 - Feb	15 - Mar	12 - Apr	20 - Oct	03 - Dec
05 - Feb	16 - Mar	13 - Apr	22 - Oct	04 - Dec
06 - Feb	17 - Mar	14 - Apr	22 - Oct	04 - Dec
07 - Feb	19 - Mar	16 - Apr	24 - Oct	06 - Dec

2.3 MIA-Riverina

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12 - Feb	02 - Apr	30 - Apr	31 - Oct	11 - Dec
13 - Feb	04 - Apr	02 - May	01 - Nov	12 - Dec
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24 - Mar	26 - Oct	23 - Nov	07 - Dec	11 - Jan
25 - Mar	27 - Oct	24 - Nov	08 - Dec	11 - Jan
26 - Mar	27 - Oct	24 - Nov	08 - Dec	11 - Jan
27 - Mar	28 - Oct	25 - Nov	09 - Dec	11 - Jan

2.3 MIA-Riverina

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2.3 MIA-Riverina

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2.3 MIA-Riverina

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2.3 MIA-Riverina

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18 - Nov	24 - Dec	21 - Jan	25 - Jan	01 - Mar
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2.3 MIA-Riverina

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APPENDIX 3 FORMS

3.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS		
NAME OF GROWER/S		
GROWER NUMBER (if previously registered)		
POSTAL OR BUSINESS ADDRESS		
	POST CODE	
PROPERTY ADDRESS		
	POST CODE	
REAL PROPERTY DESCRIPTION (of area under planting)		

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operational Manual - Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Cucurbits (type)
Citrus	Tomato

3.2 APPLICATION FOR PACKINGHOUSE REGISTRATION

APPLICATION FOR PACKER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS		
NAME OF PACKER		
AQIS REE NUMBER (if applicable)		
POSTAL ADDRESS		
	POST CODE	
PREMISES ADDRESS		
	POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a packer of .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operational Manual - Version 3 of May 1999 and agree to be bound by the conditions and restrictions contained therein as they apply to packers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Cucurbits (type)
Citrus	Tomato

3.3 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT EXPORTER REGISTRATION AND INSPECTION APPLICATION

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Version 3 of the Australian - New Zealand Bilateral Quarantine Arrangement and the BQA Systems Operational Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the BQA and the Systems Operational Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for BQA commodities will provide properly identified Inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection
The following persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Appendix 3.3

Treatment Loading Supervision Authority

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the BQA for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of BQA commodities as is required by the BQA and the contents of this Manual.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the BQA and the Systems Operation Manual Version 3 of May 1999 required for inspection purposes

Name of Applicant .....

Signature .....

Date .....

3.4 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Date	Trade Description	Tick
Commodity	Commodity	
No of Cartons	Registered Grower No.	
Registered Grower No.	Registered Packing Establishment	
	.....	
Ex 28 Number/s:	Australian Origin	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250	
Exporter/s	(Tick one)	
	Exporter Inspection completed by:.....	
	(a) Exporter	
Inspector Name	(b) Exporter delegate (name)	
(Block Letters)	**Inspected by**:	
.....	Grower Line	
Inspector's Signature	Consignment Line	

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NQ**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed **Failed** **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest **RG2 = Regulated Quarantine Pest** **RG1 = Phytosanitary Pest**
NQ = Non Quarantine Pes

3.5 FUMIGATION RECORD

Page 1 of 2

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	Number of Cartons/Commodity	Temperatures Taken *

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

Appendix 3.5

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

3.6 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKING HOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 .6^0C.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS						INITIALS				
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor					

3.7 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand that should I/we wish to re-enter the Arrangement protocol at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in block letters	Signature	Date
.....	.....	.....

Voluntary Withdrawal

I/we agree that my/our property is no longer required to be registered under the terms and conditions that are required for the New Zealand export trade for BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand that should I/we wish to re-enter the Arrangement at a future date, that I/we will have to request an initial audit of my/our property/premises and to be assessed as satisfactory before registration will be issued.

Name in Block letters	Signature	Date
.....	.....	.....

AQIS OFFICE DOCUMENTATION
Fax to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or
Inspector's Signature

.....

3.8 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection of the following property/premises:- (Grower - Packer) (delete one)

Name .....
Address .....
.....
.....
Reg No .....

I believe that for the following reasons that the above Grower/Company no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) that they have no intention to correct the above mentioned deficiency in the immediate future.

I hereby declare that the above mentioned grower/packer is suspended from the Australia - New Zealand BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Grower Name	Grower's Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

Appendix 3.9

3.9 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY ALL TOMATO CONSIGNMENTS TO BRISBANE, FROM TOWNSVILLE, BUNDABERG OR CAIRNS

DECLARATION OF TREATMENT

I, ... of .....

.....

hereby declare that the ..... number of tomatoes consigned to

.....on .....(date)

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute.

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

2. nominate a sample size of 600/950/1250* fruits to be inspected from each consignment line. (*Delete as applicable)

   AND

3. further declare that .....(insert name of supervisor) a designated person nominated by .....(insert name of exporter) has supervised the loading of this consignment for transport to .....
   .....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....19.....

Signature ..... Witness .....

3.10 TOMATO VARIETY DECLARATION

TOMATO VARIETY DECLARATION

PRODUCTION OF TOMATOES FOR EXPORT TO NEW ZEALAND

I, ... registered

New Zealand Grower No.....declare the tomatoes supplied

by me on the ..... to .....…

are of the variety ....., and these tomatoes were

harvested from the following registered block/s……

……

Signed ..... Dated .....……

Appendix 3.11

3.11 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the BQA Systems Operational Manual Version 4 of March 2001 and have the ability to recognise and identify the pests and weed seeds that are contained in the MPL's for quarantine pests.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the BQA and the Instructions contained in the Operations Manual for Australian New Zealand BQA.

Appendix 3.11

Signature .....
Printed Name ..... Date .....

Approved ..... Senior Inspector/Superving Inspector
Date ..... Seal/Stamp .....

3.12 CONTAINER HYGIENE REPORT

CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28 Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

3.13 STATUTORY DECLARATION

THE OATHS ACTS - 1867-1960

STATUTORY DECLARATION

State to wit .....

I (Name)..... of
address.....
in the State of..... do solemnly and sincerely declare that:

Product (name)..... supplied to (exporter/packinghouse, name and address
.....
.....have been grown under the AQIS/MAF protocol procedures for export of such produce to New Zealand.

My registered grower number is ..... and is current and the conditions as required by the BQA for growers have been complied with.

The produce aforementioned was loaded under my supervision on the (date).....
and comprised ..... Bins or ..... Tonnes Bulk and was loaded onto registered truck no. ..... and trailer no.....

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of "The Oaths Acts 1867-1960"

.....Signature .....

A Justice of Peace

3.14 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare that the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

3.15 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

<table>
<tr><td rowspan="3">Grower name and address:</td><td>Cucurbit type (please tick ✓)</td><td>Treatment (please tick ✓)</td></tr>
<tr><td>Cucumber ☐
Honeydew melon ☐
Rockmelon ☐
Scallopini ☐
Watermelon ☐
Zucchini ☐</td><td>Appendix 3 & 10 (methyl bromide) ☐
Appendix 4 & 10 (dimethoate dip) ☐
Appendix 10 & 11 (winter window) ☐</td></tr>
<tr><td colspan="2">Declaration

I,……hereby declare that the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.

…… ……/……/……
Signature Date</td></tr>
<tr><td>Grower number:</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>Consignee name and address:</td></tr>
</table>

Production block number	Package type (carton, bin etc)	Number of packages	Total mass

FINAL

Australia – New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual 5C

Australian Government
Department of Agriculture, Fisheries and Forestry
Australian Quarantine and Inspection Service

FINAL

This systems operation manual incorporates the New Zealand import health standards for Australian fruit fly host material and the Australian Quarantine and Inspection Service's operational requirements.

This manual is maintained and controlled by the AQIS Plant Programs Section in Canberra

Systems Operation Manual (SOM)

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS – CONTROLLED COPIES…… iv

AMENDMENT RECORDS…….. vii

GLOSSARY OF TERMS…….. viii

DEFINITIONS……... x

SECTION 1 – BACKGROUND

1.1 Bilateral Quarantine Arrangement (NZ BQA) – incorporating New Zealand Import Health Standard Requirements……. 1
1.2 Scope of Manual …….. 2
1.3 Specific changes to SOM…….. 2

SECTION 2 – PEST CATEGORIES

2.1Pest Category Classifications
2.1.1 NZ BQA/IHS Pests – Official Offshore Treatments required – Quarantine Risk Group 3 pests…….. 1
2.1.2 Additional Declaration Pests – Quarantine Risk Group 2 pests……. 1
2.1.3 International Phytosanitary Certificate (IPC) Pests – Risk Group 1 pests……. 2
2.2 Maximum pest levels…….. 2
2.1Contaminants…….. 3

SECTION 3 – APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS EXPORTED TO NEW ZEALAND

Attachment to 1 to section 3 - Summary of requirements for access of fruit fly host commodities into New Zealand from Australia……

Summary of Treatment Appendices

3.1 Appendix 1 - Country freedom from fruit flies ……. 1
3.2 Appendix 2 - Area freedom districts within Australia…… 2
3.2.1 Approved area freedom districts…… ……... 2
3.2.1.1 Riverina – MIA……... 3
3.2.1.2 Sunraysia – Victoria and New South Wales……... 3
3.2.1.3 Riverland – South Australia…… 3
3.2.1.4 Tasmania……. 3
3.2.1.5 The Ord River Irrigation Area – Western Australia…… 4
3.2.1.6 The Shepparton Irrigation Area – Victoria …… 4
3.3 Appendix 3 – Methyl Bromide Fumigation…… 4
3.4 Appendix 4 – Dimethoate dip/spray…… 4
3.5 Appendix 5 – Cold Storage……..… 5
3.6 Appendix 6 – Non-Host Status…… 5
3.7 Appendix 7 – Heat Treatments…….. 5
3.8 Appendix 8 – currently not in use…….. 5
3.9 Appendix 9 – currently not in use…….. 5
3.10Appendix 10 – Field Control Programmes……. 6
3.11Appendix 11 – Winter Window Accesss…… 6
3.12Appendix 12 – Irradiation ……. 7

SECTION 4 – RESPONSIBILITIES

Attachment 1 to Section 4 – Audit frequency table……

4.1Grower Responsibilites

4.1.1 Summary of Grower Registration Requirements……. 1
4.1.2 Summary of Audit Requirements……. 2
4.1.3 Grower Registration Requirements…….. 3
4.1.3.1 Grower Responsibilities……..……. 4

4.1.3.2 Grower Audit Responsibilities…… 4
4.1.3.3 Grower Audit – Approved Arrangements…… 5
4.1.3.4 Grower Audit – Non-Compliance. …….…... 5
4.1.3.5 Grower Suspensions…….. 6
4.2 Packinghouse Responsibilities
4.2.1 Summary of Packinghouse Registration Requirements…… 8
4.2.2 Summary of Audit Requirements……. 9
4.2.3 Packinghouse Requirements……. 10
4.2.3.1 Inspection requirements……. 11
4.2.3.2 Documentation…… 12
4.2.3.3 Security & Supervision Responsibilities…… 12
4.2.3.4 Packinghouse Audit Responsibilities……. 12
4.2.3.5 Packinghouse Non Compliance……. 13
4.2.3.6 Packinghouse Suspension…….. 14
4.3 Approved arrangements – Packinghouse Responsibilities
4.3.1 General Requirements…… …….. 15
4.3.2 Auditing for New Zealand Requirements…… 16
4.3.3 Approved arrangements – New Zealand Inspection Requirements…… 16
4.3.4 Documentation……. 17
4.3.5 Post Treatment Security……... 18
4.4 Treatment Centre Responsibilities
4.4.1 Summary of Treatment Centre Requirements…….. 19
4.4.2 Summary of Treatment Centre Audit Requirements…… 19
4.4.3 Treatment Centre Responsibilities…… 20
4.4.3.1 Process Controls……. 20
4.4.3.2 NZ BQA Treatments – AQIS supervision…… 20
4.4.3.3 Treatment Centre Audit Responsibilities…….. 22
4.4.3.4 Treatment Centre Non Compliance…….22
4.4.4 Treatment Details…….
4.4.4.1 Appendix 3 – Methyl Bromide…… 23
4.4.4.2 Appendix 4 – Dimethoate Dip/Spray…….. 25
4.4.4.3 Appendix 5 – Cold Storage……. 26
4.4.4.4 Appendix 12 – Irradiation…… 27
4.4.4.5 Table Grape Fumigation Requirements……... 32
4.4.5 Post Treatment Security……..
4.4.5.1 Appendix 2 – Area Freedom……. 34
4.4.5.2 Appendix 3 – Methyl Bromide and Appendix 4 – Dimethoate Dip/Spray…….. 34
4.4.5.3 Appendix 5 – Cold Storage…… 34
4.4.5.4 Appendix 6 – Non Host Status…….. 34
4.4.5.5 Appendix 11 – Winter Window Access……. 34
4.4.5.6 Appendix 12 – Irraditation…… 35
4.4.6 Post Treatment Transportation……
4.4.6.1 Appendix 2 – Area Freedom…… 35
4.4.6.2 Appendix 3 – Methyl Bromide, Appendix 4 – Dimethoate Dip/Spray, Appendix 5 – Cold Storage and Appendix 12 – Irradiation…… 35
4.4.6.3 Appendix 6 – Non Host Status35
4.4.6.4 Appendix 11 – Winter Window Access…… 36
4.5 Crop Monitoring Responsibilities
4.5.1 Crop Monitoring Audit Requirements…… 37
4.5.2 Crop Monitoring Non Compliance……. 37
4.6 Exporter Responsibilities
4.6.1 Summary of Exporter Registration Requirements…… 38
4.6.2 Summary of Exporter Audit Requirements…….. 38
4.6.3 Exporter Responsibilities…….. 39
4.6.3.1 Exporter Inspection……. 39
4.6.3.2 Split Consignements……. 40
4.6.3.3 Untreated Produce being forwarded from Country Areas…….. 40
4.6.3.4 Delegation…… 41
4.6.3.5 Documentation…… 41
4.6.3.6 Procedures for exporter Rejected Produce…….. 42
4.6.3.7 Post Treament Security……. 42
4.6.3.8 Security of Produce…… 43

4.6.3.9 Exporter Audit Responsibilities…… 43
4.6.3.10 Exporter Delegate Audit Responsibilities…….. 43
4.6.3.11 Exporter/Exporter Delegate Non Compliance…….. 44
4.7 Management Responsibilities
4.7.1 AQIS Canberra Office…….. 45
4.7.2 State Departments of Agriculture……46
4.7.3 AQIS State Offices……..46
4.7.4 Registration Requirements……..47
4.7.5 Sampling Requirements……..47
4.7.6 AQIS Inspection Procedures…… 48
4.7.7 Consignment Line Samples……48
4.7.8 Grower line samples……49
4.7.9 Rejection Procedures…… .49
4.7.10 AQIS Auditing Requirements…… 50
4.7.11 Audits after product rejection by AQIS…… 50
4.7.12Fruit Fly Area Freedom – State departments of Agriculture Responsibilities……51
Attachment 2 to Section 4 – AQIS plant contact list……53
APPENDIX 1 – NEW ZEALAND PEST LIST - NZ BQA COMMODITIES
AVOCADO…… 1
CAPSICUM…… 6
CITRUS……...15
CUCUMBER……...21
GRAPE…….. 29
MANGO…….. 37
MELON……..40
PINEAPPLE…….. 49
POMEGRANATE……..53
STRAWBERRY…….. 55
TOMATO…….. 59
WATERMELON…….. 65
ZUCCHINI & SCALLOPINI……72
APPENDIX 2 – FORMS
2.1 Application for Grower Registration……...80
2.2 Application for Packinghouse Registration……81
2.3 Application for Treatment Centre Registration……...82
2.4 Application to Perform Field Monitoring Advisory Services……83
2.5 Application for Exporter Registration and Inspection……84
2.6 Inspection Record……86
2.7 Fumigation Record……..87
2.8 Cold Disinfestation Record……..89
2.9 Withdrawal Notice……...90
2.10 Suspension Notice……91
2.11 Declaration of Dimethoate Treatment……..92
2.12 Container Hygiene Report…….. 93
2.13 Avocado Grower Declaration……...94
2.14 Cucurbit Grower Declaration……...95

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Holders	Address	Copy Number
Manager Plant Programs Plant Programs Branch Attn. s. 22(1)(a)(ii)	Canberra Office	1
Manager Horticulture Exports Plant Programs Branch Attn s. 22(1)(a)(ii)	Canberra Office	2
New Zealand Contact Officer Plant Programs Branch Attn s. 22(1)(a)(ii)	Canberra Office	3
AQIS Brisbane Office Horticulture Export Manager Attn s. 22(1)(a)(ii)	PO Box 222 Hamilton Queensland 4007	4
AQIS Brisbane Office State Contact Officer (C/A) Attn s. 22(1)(a)(ii)	PO Box 222 Hamilton Queensland 4007	5
AQIS Sydney Office Export Manager Attn s. 22(1)(a)(ii)	Export/Import Branch PO Box 657 Mascot 2020	6
AQIS Sydney Office State Contact Officer (C/A) Attn s. 22(1)(a)(ii)	Export/Import Branch PO Box 657 Mascot 2020 NSW	7
AQIS Melbourne Office Export Manager Attn s. 22(1)(a)(ii)	PO Box 60 World Trade Centre Melbourne 3005	8
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AQIS Adelaide Office State Contact Officer (C/A) Attn s. 22(1)(a)(ii)	PO Box 63 Port Adelaide 5015	11
AQIS Western Australia Export Manager Attn s. 22(1)(a)(ii)	PO Box 1410 Canning Vale 6155	12
AQIS Western Australia State Contact Officer Attn s. 22(1)(a)(ii)	PO Box 1410 Canning Vale 6155	13
AQIS Northern Territory Attn s. 22(1)(a)(ii)	PO Box 2268 Darwin 0801	14
Dept of Agriculture Tasmania Attn s. 47F(1)	Macquarie Wharf No 1 Hobart 7000	15
Dept of Agriculture Tasmania State Contact Officer Attn s. 47F(1)	Macquarie wharf No. 1 Hobart 7000	16
Ministry of Agriculture and Forestry National Advisor Attn s. 47F(1)	PO Box 2526 Wellington New Zealand	17
s. 22(1)(a)(ii) Plant Biosecurity Biosecurity Australia	Canberra Office	18
AQIS Mildura Office Attn s. 22(1)(a)(ii)	PO Box 2756 Mildura 3500 Vic	19
AQIS Griffith Office Attn s. 22(1)(a)(ii)	104 - 110 Banna Avenue Griffith NSW 2680	20
AQIS Bundaberg Office Attn s. 22(1)(a)(ii)	PO Box 815 Bundaberg 4670	21
AQIS Cairns Office Attn s. 22(1)(a)(ii)	PO Box 96 Cairns QLD 4870	22
AQIS Townsville Office Attn s. 22(1)(a)(ii)	PO Box 1245 Townsville QLD 4810	23
AQIS Riverland Office Attn s. 22(1)(a)(ii)	PO Box 74 Barmera SA 5345	24

Victorian Department of Agriculture Attn s. 47F(1)	Private Bag 15 Ferntree Gully Delivery Centre 3156	25
New South Wales Agriculture Attn s. 47F(1)	Locked Bag 21 Orange NSW	26
Primary Industries South Australia Attn s. 47F(1)	GPO Box 1671 Adelaide	27
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AQIS Shepparton Office Attention s. 22(1)(a)(ii)	PO Box 6251 Shepparton 3630	31
AQIS Gladstone Office Attention s. 22(1)(a)(ii)	PO Box 1682 Gladstone QLD 4680	32
Queensland Department of Primary Industries and Fisheries Attention s. 47F(1)	PO Box 652 Cairns QLD 4870	33

AQIS State Offices and State Departments of Agriculture will make up additional 'Official Distribution Lists' for their own requirements that may include industry bodies, exporters and packinghouse/growers. AQIS Offices and State Departments of Agriculture must implement procedures to record distribution lists for the issue of controlled copies of this Manual and for amendments to this manual to those nominated on distribution lists.

AMENDMENT RECORD

Amendments to this Manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	s. 22(1)(a)(ii)	18 June 1999
2		14 July 1999
3		27 April 2000
4		March 2001
5 5A 5B 5C		29 April 2002 March 2002 December 2004 January 2006
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36		

GLOSSARY OF TERMS

ANVAS	Avocado Nursery Voluntary Accreditation Scheme
AQIS	Australian Quarantine and Inspection Service
CA	Certification Assurance
DAFF	Department of Agriculture, Fisheries and Forestry
Dmin	The localized minimum absorbed dose within the process load
Dmax	The localized maximum absorbed dose within the process load
EXDOC	Export Documentation System (Electronic Documentation System)
EX28	Notice of Intention to Export/Export Permit
EX161	Inspection advice notice
EX186	Transfer Certificate
EX222	Compliance Arrangement equivalent of EX28
ED	Exporter Delegate
Gray (Gy)	Unit of absorbed dose where 1 Gy is equivalent to the absorption of 1 joule per kilogram
IHS	Import Health Standards (New Zealand)
ISO	International Standards Organisation
ISPM	International Standard for Phytosanitary Measures
MAF	Ministry of Agriculture and Forestry (New Zealand)
MAP	Maximum Allowable Prevalence
MB	Methyl Bromide
MeV	Mega Electron Volt
NASS	National Agricultural Statistics Service (USA)
NZ BQA	Australia-New Zealand Bilateral Quarantine Arrangement
QC	Quality Control

RFP	Request for Permit
SBV	Sun Blotch Viroid (Avocado)

DEFINITIONS

AQIS Inspection Lines	An inspection line is any number of packages from one exporter from the same NZ BQA treatment pathway presented for inspection at one time. Lines are rejected/accepted for export based on this inspection. This includes lines presented for inspection that will be subsequently split into separate consignments for export to several destinations in New Zealand.
Commodity	All species/varieties of produce that come under the one genus of plants and are treated by the same disinfestation treatment, are to be considered as one commodity. (i.e. rockmelons and zucchini are one commodity under the cucurbit group of plants - mandarins and lemons are one commodity under citrus).
Consignment Line Inspection	Inspection performed by an exporter or exporter delegate and consists of commodities from a common treatment pathway – can be from different growers.
Grower Line Inspection	Inspection performed by the exporter/exporter delegate that consists of one grower and one treatment pathway. If this inspection is performed in the packing line by an exporter delegate, and the inspection regime is approved by AQIS, (see Table 7), there is no need for an additional exporter/exporter delegate inspection prior to AQIS inspection. Inspection records (see appendix 2.6) have to be kept by the packinghouse and also must accompany the consignment to AQIS inspection.
AQIS Inspection	May be by grower line or consignment at the option of the exporter. The exporter/exporter delegate will provide their inspection records prior to any AQIS inspection being undertaken. AQIS inspection will be employed at the same sample regime used by the exporter/exporter delegate.
End Point Inspection	A process where a packinghouse under AQIS Approved arrangement (or approval by AQIS senior inspector), has a defined (documented) sampling and inspection method. A sampling plan is carried out, in accordance with requirements outlined in Table 7, over a period of time during the packing process. [NB Packhouse not operating under an Approved Arrangement can only conduct ED inspections under these systems. An **AQIS inspection** must still be carried out.] Product inspection carried out on an individual grower line basis following disinfestation treatments. Lines are rejected or accepted for AQIS inspection based on the results.
In - Line Inspection	Approved Arrangement Sheds - A process where a packinghouse under AQIS Approved Arrangements has defined a sampling and inspection method, that meets the appropriate sampling plan required in this Manual, over a period of time during the packing process.

	Non Approved Arrangment sheds - This inspection is completed for individual grower and commodities for each processing run (24 hours). The inspection takes place prior to the commodity being packed. If the packinghouse has exporter delegates, this inspection is not required. (See grower line inspection above)
Monitoring	The actions undertaken to detect the presence of fruit fly or other Risk Group 2 pest/contaminant in the orchard area and/or to meet New Zealand's fruit fly area freedom specifications.
Non- Regulated Pest	Pests for which actions would not be undertaken if they were intercepted/detected.
Pathway	A documented series of activities that, when carried out according to approved procedures, form a discrete and traceable system, from the grower to export loading point.
Phytosanitary Certificate	Certificate signed by an AQIS Inspector in accordance with the International Plant Protection Convention verifying that produce has been produced in accordance with the Australia - New Zealand NZ BQA and the directions of this Manual and appropriately endorsed.
Regulated Pest	Pests for which actions would be under taken if they were intercepted/detected.
RFP (Request for Permit)	EXDOC equivalent to Ex28/Ex222 (Notice of Intention to Export)
Risk Group 3 Pest	Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which on entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or have significant economic effects on their production and/or environment (some importing countries prohibit the entry of the host commodity). An official surveillance system is required for such pests in New Zealand.
Risk Group 2 Pest	Risk Group 2 pests are those regulated pests which on introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.
Risk Group 1 Pest	Risk Group 1 pest are those regulated pests which on introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.
Secure Package	Any approved method that will minimise the risk of cross contamination, re-infestation or substitution of produce destined for New Zealand after it has been inspected and/or treated, to ensure it meets the New Zealand entry requirements.

Trade Samples	Commodities being forwarded for market appraisal, packaging methods or other types of research work being investigated on a commercial scale by importers/exporters involved directly in the Australia - New Zealand trade.
Unit	That item which is considered to represent a single item of the good in question; i.e A single piece of fruit or a single vegetable, a bunch of grapes, a head/floret of broccoli, a stem or a leaf/bunch of leaves (depending on packing)
Winter window	Winter window is effectively a treatment (Appendix 11) which allows access for host commodities of *Bactrocera cucumis* into New Zealand between 1 May and 30 September in any year.

SECTION 1. BACKGROUND

1.1 Bilateral Quarantine Arrangement (NZ BQA) - Incorporating New Zealand Import Health Standard Requirements

The NZ BQA is a formal agreement between the Australian Quarantine and Inspection Service (AQIS) and the New Zealand Ministry of Agriculture and Forestries (MAF), to ensure New Zealand's pre-export requirements are documented. This Manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The NZ BQA includes a series of treatment appendices that describe the requirements for a particular treatment for fruit fly host material. The structure incorporates developments in relation to the documentation of New Zealand Import Health Standards (IHS) on a commodity-by-commodity basis.

New Zealand have reviewed the tolerance levels for fruit flies and now consider disinfestation treatments providing 32 insect survivors in one million treated insects (Probit 9 treatments) to be adequate security for their import standards.

All approved fruit fly disinfestation treatments listed in the SOM must meet the required New Zealand disinfestation standards. Any new disinfestation treatments may need to be investigated (particularly heat treatments), and will need to meet the efficacy requirements of the New Zealand IHS systems.

Grower and packer requirements are no longer mandatory for all treatment pathways* where an approved disinfestation treatment is applied. However, packinghouses that have some responsibilities delegated to them through treatments and exporter inspection arrangements will still have responsibilities to fulfil to ensure the NZ BQA requirements are met. There will be much more emphasis placed on treatment centres, treatment centre operators, post treatment security and exporter requirements than previous SOMs.

*NOTE: Growers of some commodities will need to undertake specific responsibilities for Risk Group 2 pests in the way of field control programs as a treatment management option. For further information see Grower Responsibilities in Section 5.

Under the NZ BQA framework, the emphasis is on treatment pathways. This means for many commodities there are no longer mandatory requirements to document and undertake pre-treatment activities.

Procedures, which may no longer be compulsory under the new NZ BQA, include;

. Grower registration - Monitoring and spray diaries (unless specific controls are required for defined Quarantine Risk Group 2 pests).

. Packer registration - Except when packing Risk Group 2 pest commodities, conducting approved treatments or undertaking exporter delegation responsibilities.

NOTE: Grower and/or packer registration is required when traceback to the "treatment" includes pest free production areas, infield controls for fruit fly (Appendix 10); or non-host status treatment with special requirements (e.g. designated non-host status by variety).

The NZ BQA and the requirements of the SOM concentrate on the documented responsibilities of treatment of produce through to export. The process includes security of the system once treatment has been undertaken and inspection procedures to ensure accurate phytosanitary certification and consignment homogeneity.

For some fruit fly host commodities, it will only be necessary to have an auditable system from the treatment facility until export loading to safeguard against possible product reinfestation or substitution.

Conversely, for other commodities where in-field controls are mandatory, an auditable system must be in place from grower through to export loading.

1.2 Specific Changes to the SOM

- Zucchini included in winter window treatment pathway
- Winter window audits every 2 months – providing substantial compliance is proven
- Removal of one inspection if exporter has delegated responsiblility to packinghouse (tomatoes excluded)
- Change in structure/formatting of SOM - more user friendly
- The addition of a treatment centre registration form
- The addition of Appendix 12 – Irradiation
- Removal of grower line inspections

1.3 Scope of the Manual

This Systems Operation Manual is designed to ensure;

. Only approved fruit fly host commodities are exported to New Zealand
. Homogeneity of fruit fly host commodity consignments
. Approved treatments for fruit fly host produce are used
. Required levels and intensity of inspection of fruit fly host produce are maintained
. Post treatment security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce
. Traceability back to grower/packer/treatment centre (as appropriate)
. Accurate phytosanitary certification in accordance with New Zealand requirements

It is recommended that AQIS State Offices and State Departments of Agriculture (or equivalents) conduct additional management audits of the systems to ensure State responsibilities are being adequately performed and recorded.

The SOM gives instructions for audit procedures and maintenance of records that will be the responsibility of AQIS State Offices, and where applicable State Departments of Agriculture or their equivalents (where these States still retain independent export inspection regimes).

SECTION 2. PEST CATEGORIES

MAF have made some alterations to the previous pest lists used in conjunction with NZ BQA products. Some of these changes include amendments to pest classifications or categories. Pest Lists are commodity specific and include reference to pests regarded as non-quarantine risks to enable additional direction during inspections.

Note: Any pests/disease detections not presently included in the Appendices **must** be reported to AQIS Central Office immediately so advice and categorisation can be made in conjunction with MAF. The consignment must be held until correct identification has been made by approved experts.

2.1 Pest Category Classifications

2.1.1 NZ BQA/IHS Pests - Official Offshore Treatments Required - Quarantine Risk Group 3 - PESTS

Risk Group 3 pests (e.g. economically significant species of fruit flies) are those regulated pests which upon entry into New Zealand would cause a major disruption to market access for a wide range of New Zealand commodities and/or would have significant economic effects on their production and/or environment (some importing countries prohibit the entry of the host commodity). An official surveillance system is required for such pests in New Zealand.

Hosts of Risk Group 3 pests require approved disinfestation treatments to be undertaken in Australia and the establishment of operational systems documenting the procedures to ensure AQIS phytosanitary certification is meaningful and auditable by MAF.

The action taken by MAF should Risk Group 3 pests be detected on arrival in New Zealand will be to reship or destroy the offending consignment and immediately suspend the export treatment pathway. For example, if an offending consignment is associated with dimethoate treatment, all dimethoate treatments will be suspended, until an AQIS audit is completed and the results accepted by MAF.

The same rule applies to area freedom or non-host status treatment pathways.

2.1.2 Additional Declaration Pests -Quarantine Risk Group 2 - PESTS

Risk Group 2 pests are those regulated pests which upon introduction into New Zealand could cause a major disruption to market access (some importing countries require specific pre-export Phytosanitary treatments) and/or significant economic impacts on the production of a particular commodity/commodities and/or the environment.

These pests/contaminants will require an Additional Declaration for Risk Group 2 pests on the phytosanitary certificate. The Additional Declaration will certify some form of management practice (eg. a pest control program in the field), has been carried out to ensure the consignment is free from the pest/contaminant of concern.

The action taken by MAF on interception of live Risk Group 2 pests will be to reship or destroy the offending consignment and immediately advise AQIS of the non-conformance. In some instances the consignment may be ordered for treatment. There will be no suspension of trade invoked for

Risk Group 2 pests although AQIS will usually conduct a follow up audit to determine the cause of the system failure and implement corrective action where possible.

Please see individual commodity pest lists (Appendix 1) for details of required additional declarations for Risk Group 2 pests.

2.1.3 International Phytosanitary Certificate (IPC) Pests - Risk Group 1 - PESTS

Risk Group 1 pests are those regulated pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

The action taken by MAF on interception of live Risk Group 1 pests will be to allow the consignment to be reconditioned, if an approved treatment is available, or alternatively, the consignment will be reshipped or destroyed.

Should Risk Group 1 pests be detected during exporter/exporter delegate inspections, the consignment must be rejected and subject to corrective action before being presented for AQIS inspection.

In accordance with International Plant Protection Convention (IPPC) rules for the issuance of phytosanitary certificates, should any live Risk Group 1 pests be detected during AQIS inspection the consignment must be rejected and subject to corrective action (reprocessing, treatment, withdrawal of offending grower etc.), before being resubmitted for further inspection and certification.

2.2 Maximum Pest Levels

The inspection tolerances listed in Table 1 ensure a 95% confidence that the given Maximum Allowable Pests (MAP) will not be exceeded for any category.

A selected sample size must be nominated by the exporter/exporter delegate prior to inspection. Once a sample number has been selected for a line/consignment, it cannot be varied and must then be used for all subsequent inspections. That is, the AQIS inspections will all be conducted at the nominated sample size rate.

TABLE 1
INSPECTION TOLERANCE TABLE
SAMPLE SIZES - PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weedseeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 - 2000	520	0	≤ 7	0
2001 - 3000	550	0	≤ 7	0
3001 - 4000	560	0	≤ 7	0
4001 - 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

Pests listed as Non-regulated (non-quarantine) pests at Appendix 1 have an unlimited tolerance during inspection. These pests are regarded as non-quarantine pests between Australia and New Zealand.

2.3 Contaminants

Consignments contaminated with soil, or other potential carriers of regulated pests (eg. leaf litter) will not be permitted entry if found to be above the acceptable tolerance level. MAF Biosecurity Authority (Plants) Standard 152.02 – section 7.4 gives the following tolerances for soil and foliage contamination:

- Consignment lines contaminated with soil in excess of 25g per 600 units sampled shall be washed free of soil prior to release, reshipped or destroyed at the importer's option and expense.

- Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped or destroyed at the importer's option and expense.

SECTION 3 – IMPORT HEALTH STANDARDS APPROVED TREATMENTS FOR AUSTRALIAN FRUIT FLY HOST PRODUCTS EXPORTED TO NEW ZEALAND

Attachment 1 to Section 3 - Summary of requirements for access of fruit fly host commodities into New Zealand from Australia

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Avocado *Persea americana*	Area freedom	✓	✓	✓		✓	- "The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia" - "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid" - **EXDOC ENDORSEMENT # 1641**
Avocado	Cold storage 1°C (±0.2°C) for 16 days	✓	✓	✓	✓	✓	- "The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia" - "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid" - **EXDOC ENDORSEMENT # 1649**
Capsicum *Capsicum annuum*	Area freedom	✓	✓	✓		✓	- "The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1637**

❖ GR- Grower regsistration GM – Grower monitoring and spray diaries PR – Packinghouse registration TR – Treatment Regsitration ER- Export Registration

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Capsicum*	Dimethoate (spray only) 400ppm and fruit must be sprayed for a minimum of one minute	✓	✓	✓	✓	✓	- "The capsicums in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF". - **EXDOC ENDORSEMENT # 1642** - If required "The Capsicums in this consignment have been Fumigated with methyl bromide at the rate of 32gm per cubic metre for 2 hours at 21°C at a maximum of 50% chamber capacity"
Citrus *Citrus spp.*	Area freedom	QLD	QLD	✓		✓	- "The citrus in this consignment has been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa and Xanthomonas axonopodis pv citri"* - **EXDOC ENDORSEMENT # 1638**
Citrus	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	QLD	QLD	✓	✓	✓	- "The citrus in this consignment has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa and Xanthomonas axonopodis pv citri"* - **EXDOC ENDORSEMENT # 1648**

❖ GR- Grower regsistration GM – Grower monitoring and spray diaries PR – Packinghouse registration TR – Treatment Regsitration ER- Export Registration

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Cucumber *Cucumis sativus*	Area freedom			✓		✓	- "The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1639** -
Cucumber*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	✓	- "The cucumbers in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1643**
Grape *Vitis Vinifera*	Area freedom	✓	✓	✓	✓	✓	- "The grapes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - "The grapes in this consignment have undergone appropriate pest control activities that are effective against *Conogethes punctiferalis*" - "The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccus hirsutus*" - **EXDOC ENDORSEMENT # 1574**

❖ GR- Grower regsistration GM – Grower monitoring and spray diaries PR – Packinghouse registration TR – Treatment Regsitration ER- Export Registration

COMMODITY	TREATMENT	REGISTRATION REQUIRED					ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Grape *Vitis Vinifera*	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	✓	✓	✓	✓	✓	- The grapes in this consignment have been inspectied in accordance with appropriate official procedures and found to the free from any visually dectectable quarantine pests, specified by the New Zeland Ministry of Agriculture and Forestry - The grapes in this consignment have been treated in accordance with Appendix 5 (cold storage) of the Arrangement between New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic signifigance into New Zealand from Australia - The grapes in this consignment have been treated for *Latrodectus hasselti* (Red back spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes - The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis* - The grapes in this consignment have been sorced from an area free (verified by official detection survey) from M*aconellicoccis hirsutus* - **EXDOC ENDORSEMENT # 1577**
Honeydew *Cucumis melo*	Area freedom			✓		✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1640**
Honeydew*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1644**

❖ GR- Grower regsistration GM – Grower monitoring and spray diaries PR – packinghouse registration TR – Treatment Regsitration ER- Export Registration

COMMODITY	TREATMENT						ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Honeydew* (1 May – 30 Sep)	Winter Window	✓	✓	✓		✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1628**
Mango *Mangifera indica*	Irradiation				✓		- The mangoes in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT # 3287**
Papaya *Papaya*	Irridation 250 Gy				✓		- The papaya in this consignment have undergone appropriate pest control activities that are effective against *Conogethes punctiferalis* - The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT #**
Papaya *Papaya*	In-field controls Irradiation 150 Gy	✓	✓	✓	✓	✓	- The papaya in this consignment have undergone appropriate pest control activities that are effective against *Conogethes punctiferalis* - The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT #**
Pears *Pyrus communis*	Area freedom			✓		✓	- "The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1575**
Pears	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days				✓	✓	- "The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1578**

COMMODITY	TREATMENT						ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
pineapple *Ananas comosus* (smooth cayenne only)	Non-host status			✓		✓	- "The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1579**
Pumpkin *Cucurbita pepo & cucurbita moschata*	Area freedom			✓		✓	- "The pumpkins in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pumpkins in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1918**
Rockmelon Cucumis melo	Area freedom			✓		✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF" EXDOC ENDORSEMENT # 1631
Rockmelon* (1 May – 30 Sep)	Winter Window	✓	✓	✓		✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - EXDOC ENDORSEMENT # 1628

❖ GR- Grower regsistration GM – Grower monitoring and spray diaries PR – packinghouse registration TR – Treatment Regsitration ER- Export Registration

COMMODITY	TREATMENT	GR	GM	PR	TR	ER	ADDITIONAL DECLARATIONS
Rockmelon	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute				✓	✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" EXDOC ENDORSEMENT # 1646
Scallopini *Cucurbita maxima & cucurbita pepo*	Area freedom			✓		✓	- "The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1632**
Scallopini*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	✓	- "The scallopinis in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1633**
Strawberry *Fragaria spp.*	Area freedom			✓		✓	- "The strawberries in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1573**

❖ GR- Grower regsistration GM – Grower monitoring and spray diaries PR – packinghouse registration TR – Treatment Regsitration ER- Export Registration

COMMODITY	TREATMENT						ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Strawberry	Methyl bromide 48g/m^3 for 3 hours at a temperature of at least 15°C				✓	✓	- "The strawberries in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1576**
Watermelon *Citrullus lanatus*	Area freedom			✓		✓	- "The watermelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1635**
Watermelon*	Methyl bromide 32g/m^3 for 4 hours at a temperature of 21°C to 26°C	✓	✓	✓	✓	✓	- "The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1626**
Watermelon* (1 May – 30 Sep)	Winter Window	✓	✓	✓		✓	- "The watermelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - EXDOC ENDORSEMENT # 1629

❖ GR- Grower regsistration GM – Grower monitoring and spray diaries PR – packinghouse registration TR – Treatment Regsitration ER- Export Registration

COMMODITY	TREATMENT						ADDITIONAL DECLARATIONS
		GR	GM	PR	TR	ER	
Zucchini *Cucurbita pepo*	Area freedom			✓		✓	- "The zucchinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1636**
Zucchini	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute				✓	✓	- "The zucchinis in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1647**
Zucchini	Winter Window	✓	✓	✓		✓	- "The Zuccinis in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The Zuccinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The Zuccinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 3339**

❖ GR- Grower regsistration GM – Grower monitoring and spray diaries PR – packinghouse registration TR – Treatment Regsitration ER- Export Registration

SECTION 3. SUMMARY OF TREATMENT APPENDICES

3.1 Appendix 1 – Country Freedom from Fruit Fly (based on NASS Standard 128.03.07)

Appendix 1 to the SOM refers to fruit flies considered to be exotic and therefore not established in Australia. e.g. *Bactrocera cucurbitae* (melon fly).

Through the Australian surveillance and monitoring program, managed by the National Plant Protection Office within DAFF (and consisting of exotic fruit fly trapping and monitoring regimes which are conducted at all international air and seaports), MAF will accept the whole of Australia free from exotic fruit flies. There are no specific requirements or endorsements to the phytosanitary certificate required for this Appendix to the NZ BQA.

The air and seaports that are included in the trapping and monitoring regimes are listed below;

Northern Territory

Darwin	Gove	Groote

Queensland

Brisbane	Bundaberg	Cairns
Gladstone	Karumba	Mackay
Mourilyan Harbour	Thursday Island	Townsville
Weipa		

New South Wales

Coffs Harbour	Newcastle	Sydney
Wollongong	Yamba	

Victoria

Geelong	Melbourne/Westernport	Portland

South Australia

Adelaide	Ceduna	Port Augusta
Port Lincoln	Port Pirie	Whyalla

Western Australia

Albany	Broome	Bunbury
Carnarvon	Dampier	Derby
Esperance	Geraldton	Karratha
Perth/Fremantle	Port Hedland	Wyndham

Tasmania

Devonport/Burnie	Hobart	Launceston

3.2 Appendix 2 – Area freedom districts within Australia (based on NASS standard 158.03.06)

Appendix 2 refers to those fruit flies which are endemic to Australia, but for which various districts have, through trapping and monitoring programs, been able to establish area freedom from those flies. eg. *Bactrocera tryoni*.

Area freedom from fruit flies is considered an approved treatment for those areas where approved trapping regimes are in place in accordance with the minimum Standards covered by the Australian Code of Practice for the Management and Control of Queensland Fruit Fly; and where equivalent permanent trapping regimes are in place for Mediterranean fruit fly and Oriental species of fruit fly as stipulated in the New Zealand NASS Standard 158.03.06 and NASS Standard 158.03.07.

NOTE: Should any stages of Risk Group 3 fruit fly (alive or dead) be found during AQIS or Industry inspections in Australia, AQIS will inform the relevant State Department of Agriculture of the detection. AQIS will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.
Should any stages of Risk Group 3 fruit fly (either alive or dead) be found during MAF import inspections, area freedom certification will be suspended for all districts of Australia until an AQIS audit determines the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on results of the AQIS audit.
Should any stages of a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

MAF have approved (under specific management criteria - New Zealand NASS Standard 158.03.06) a 15km radius suspension zone for a period of one generation plus 28 days (from when the last fly was caught) to be implemented around fruit fly outbreak sites in the Riverland (including the Riverland extension area and Mypolonga), Sunraysia, Tasmania, Riverina, Ord River irrigation area and Shepparton irrigation area. A fruit fly outbreak will occur where either: 2 male flies are detected within 400 metres within 14 days; 1 female fly is detected; or one or more larvae are detected.

Should, as a result of detection surveys, there be a situation where 2 outbreak sites are found between 1 - 3 kms apart, a 30 kms outbreak zone will be applied from a mid-distance between the outbreak sites. Where detections reveal two outbreak sites in excess of 3 kms apart, two 15 kms radii circles will be applied to each outbreak site.

State Departments of Agriculture (or their equivalents) must report all fruit fly finds (including single fly detections) in the fruit fly area freedom zones to AQIS Central Office within 2 days of detection and identification. This information shall be passed onto MAF at the earliest opportunity thereafter.

3.2.1 Approved area freedom district

The following districts are recognised as being area free of all species of fruit fly as determined by trapping surveys and monitoring data forwarded by AQIS to MAF, and accepted by MAF as meeting their requirements under NASS Standards 158.03.06.

3.2.1.1 Riverina – MIA

This area covers the horticulture growing districts along the Murrumbidgee River (as well as the township of Hillston on the Lachlan River), and includes (but is not excluded to) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrandera and Darlington Point and the towns which are located between the above nominated towns.

Area (b) is the Hillston District.

Area (c) is the Menindee District.

3.2.1.2 Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and other areas around and between these towns.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and other areas between these towns.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and other areas between these towns.

3.2.1.3 Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri, Barmera, Waikerie and other areas between these towns.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, and includes the towns in between and the Shire of Mildura.

Area (i) the Mypolonga township surrounds.

3.2.1.4 Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any flies that may have been transported from the mainland, can also claim area freedom from fruit

flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

3.2.1.5 The Ord River Irrigation Area – Western Australia

This area covers the Ord River Irrigation Area (ORIA) as outlined below. **This is for Mediterranean fruit fly area freedom only.**

Area (j) **Ord River Irrigation Area (Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the townsite of Kununurra and north-west of the Ord River).**

3.2.1.6 The Shepparton Irrigation Region – Victoria

This area covers the Shepparton Irrigation Region (SIR) as outlined below.

Area (k) **Production areas and townships of Cobram, Koonoomoo, Invergordon, Numurkah, Katandra West, Katamatite, Wunghnu, Tallygaroopna, Congupna Merrigum, Kyabram, Lancaster, Girgarre, Stanhope, Tongala, Shepparton, Ardmona, Coomboona, Undera, Mooroopna, Arcadia, Kialla, Murchison, Toolamba, Tatura, Dhurringile, Yarroweyah, Strathmerton, Katunga, Echuca, Colbinabbin, Corop, Rochester, Lockington, Rushworth, Wyuna, Bunbartha, Barmah, Picola, Nathalia, Waaia, and Bearii and seasonal tomato production areas.**

NOTE: In the event "Area Freedom" is suspended within any of the above defined regions at any time, packinghouses who intend to pack both "area free commodities" and "suspension zone commodities" must develop written procedures to show how commodities from each area will be identified, segregated, processed, stored and documented. Commodities from "area free zones" and those needing physical or chemical treatments must be shipped as separate consignments and cannot be co-joined.

3.3 Appendix 3 - Fumigation

Strawberries and **watermelons** are the only commodities permitted to be exported to New Zealand under this treatment. If watermelons are exported to New Zealand under this treatment additional conditions listed in Appendix 10 of the SOM must also be met.

Strawberries and watermelons cannot be combined as one consignment. This is because both come from distinctly different pathways. (ie. strawberries only require fumigation whereas watermelons require both fumigation and in-field controls).

3.4 Appendix 4 - Dimethoate

Tomatoes, **capsicums**, **zucchinis**, **rockmelons**, **honeydew melons**, **cucumbers** and **scallopinis** are the only commodities permitted to be exported to New Zealand under this treatment. In addition, commodities exported to New Zealand under this treatment must also meet conditions listed in Appendix 10 of the SOM.

Commodities can only be combined to make up a single consignment if they have come from the same treatment pathway ie.zucchinis and rockmelons; or cucumbers, scallopinis and honeydew melons. Tomatoes and Capsicums each form separate treatment pathways (even though they remain under Appendix 4 & 10), and as such must be treated as separate commodities for the purpose of inspection.

Although growers and packinghouses of rockmelons and zucchinis need not be specifically registered for the NZ BQA, packaging of products from this treatment pathway will be marked in some way to identify the grower and packinghouse, and must be labelled with the exporter's name and address.

3.5 Appendix 5 – Cold Treatment

Citrus fruits, **pears**, **tablegrapes** and **avocadoes** can be treated by cold storage disinfestation for export to New Zealand.

3.6 Appendix 6 – Non-Host

MAF have agreed to some commodities having non-host status. **Pineapples of the smooth cayenne variety** are regarded as a non-host of endemic Australian fruit flies and can be shipped under the NZ BQA. It is important to note non-host status applies to endemic species of fruit flies and therefore, should Australia have an incursion of an “exotic” species of fruit fly for which pineapple may be a host; Appendix 6 may be suspended until eradication.

3.7 Appendix 7 – Heat Treatments

Australia is not permitted to use heat treatment disinfestation methods for fruit fly host materials exported to New Zealand at this time.

Heat treatments such as vapour heat treatment (VHT) and high temperature forced air (HTFA) are recognised treatments for certain importing countries. Currently, Australia has not submitted any efficacy data to MAF of VHT or HTFA as approved treatments for all nominated fruit flies for any Australian commodities.

Should any heat treatments be approved by MAF in the future, requirements and conditions will be included in this Manual at that time.

3.8 Appendix 8 – not currently in use

3.9 Appendix 9 – not currently in use

3.10 Appendix 10 - Field control programmes

The field control programmes referred to in this section of the SOM specifically relate to the **control of Risk Group 3 fruit flies**.

This Appendix is intended to be used in combination with other appendices rather than as a stand-alone treatment. For example, cucumber exports to New Zealand under the dimethoate dip treatment require both a post-harvest dip and pre-harvest field control programme (Appendix 4 and Appendix 10).

The treatment/commodity combinations that require reference to this section of the manual are:

Section - treatment	**Commodity**
3.3 - Methyl bromide fumigation	Watermelon
3.4 - Dimethoate dip/spray	Capsicum, scallopini, cucumber, honeydew melon, tomato
3.11 - Winter window	Rockmelon, honeydew melon, cucumber, watermelon, zucchini, scalopini

3.11 Appendix 11 – Winter Window

A "Winter Window" access period has been negotiated between MAF and AQIS, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly). "Winter Window" specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment. The access period is between **1 May and 30 September in any year** (arriving in New Zealand).

Although cucurbits require no post-harvest treatments for "Winter Window" access, additional fruit flies have been listed as Risk Group 3 pests. Area freedom for these other flies must be established before commodities can be exported to New Zealand under this appendix.

Accordingly, **zucchini, scallopni, rockmelons, honeydew melons** and **cucumbers** can be exported under this appendix, but only from the states of Queensland, New South Wales, Victoria, the Northern Territory, the Ord River Irrigation Area (ORIA), and Tasmania (for which area freedom from Mediterranean fruit fly has been established).

As cucumber fruit fly is the only Risk Group 3 pest listed for **watermelons**, this commodity can be exported under this appendix from all areas in Australia.

3.12 Appendix 12 – Irradiation

Mangoes are permitted to be treated by irradiation for export to New Zealand. New Zealand has prescribed a treatment rate of 250Gy, which is considered effective against all arthropods on the Mango pest list.

Papaya is permitted to be treated by irradiation for export to New Zealand. New Zealand has prescribed two options for phytosanitary measures:

i. A treatment rate of 250Gy, which is considered effective against all anthropods on the Papaya pest list.

ii. A treatment rate of 150Gy if growers/exporters utilise pest management practices that are efficacious against yellow peach moth. Pest management measures may include, but are not necessarily limited to:

- Pest free areas
- Physical exclusion (such as bagging fruit)
- Chemical treatments

Attachment 1 to Section 4 - AQIS Audit Frequency Table

	Initial Year of registration	**Continuous Registration**	**Winter Window**
Grower	Initial audit prior to export + One additional audit during season *** Tomatoes** – Initial audit prior to export + monthly audits of property & spray diaries	One audit early in new season (no initial audit required) *** Tomatoes** – Initial audit prior to export, extending to 2 monthly if substantial compliance is shown	Monthly audits of property & spray diaries * Audits extended to 2 monthly if substantial compliance is shown
Packer	Initial audit prior to export + One additional audit during season	Minimum one audit annually	
Treatment Centre	Monthly audits required in first year ***Tomatoes** – Monthly audits & monthly Dimethoate samples required by both AQIS & treatment Centre	**Fumigation -** One annual audit in first 10 days of season (to be conducted during a treatment) + 2-3 times during season **Cold Storage** – One annual during first 3 treatments **Dimethoate -** One initial audit during the first 10 days of season + 2 audits during the season ***Tomatoes** – Initial audit prior to export, audits and AQIS dip sample extending to 2 monthly if substantial compliance is shown – Treatment centre still required to take monthly dip sample for analysis	
Exporter Delegate	Initial audit prior to export + One additional audit during season	Minimum two audits per year If fail at two AQIS end point inspections, immediate audit required	
Exporter	One audit Annually	One audit Annually	
Crop Monitor	One Audit Annually	One audit Annually	

SECTION 4 - RESPONSIBILITIES

4.1 Grower Responsibilities

4.1.1 Summary of Grower Registration Requirements

Appendix 2 - Area free

- Avocadoes - Growers must register with AQIS to maintain field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
- Capsicums – Growers must register with AQIS for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
- Grapes - Growers must register with AQIS to maintain field controls for the Risk Group 2 pest *Conogethes punctiferales*. AQIS will certify Southern State grapes area free for the Risk Group 2 pest *Maconellicoccus hirsutus*
- Other Commodities – growers are not required to register with AQIS for export under this treatment.

Appendix 3 - Fumigation

- Strawberries - growers are not required to register with AQIS for export under this treatment.
- Watermelons - growers must register with AQIS to maintain field controls minimising the risk of fruit fly infestation during production.

Appendix 4 - Dimethoate

- Capsicums - growers must register with AQIS to maintain field controls minimising the risk of fruit fly infestation during production. Additionally, growers must register for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
- Cucumbers - growers must register with AQIS to maintain field controls minimising the risk of fruit fly infestation during production.
- Honeydew melons - growers must register with AQIS to maintain field controls minimising the risk of fruit fly infestation during production.
- Rockmelons - growers are not required to register with AQIS for export under this treatment.
- Scallopinis - growers must register with AQIS to maintain field controls minimising the risk of fruit fly infestation during production.
- Tomatoes - growers must register with AQIS to maintain field controls minimising the risk of fruit fly infestation during production.
- Zucchinis - growers are not required to register with AQIS for export under this treatment.

Appendix 5 – Cold Treatment

- Avocadoes - growers must register with AQIS to maintain field controls for the Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
- Citrus fruits - Queensland growers must register with AQIS to maintain field controls for the Risk Group 2 pest *Guignardia citricarpa* (citrus black spot). Other State departments survey for citrus black spot, negating the need for grower registration.
- Pears - growers are not required to register with AQIS for export under this treatment.
- Tablegrapes – growers must register with AQIS to maintain field controls for the Risk group 2 pest *Conogethes punctiferales* (yellow peach moth). AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest *Maconellicoccus hirsutus* (hibiscus mealybug).

Appendix 6 – Non-Host

- Growers are not required to register with AQIS for smooth cayenne variety pineapples under this treatment. However, growers must keep records verifying smooth cayenne parentage.

Appendix 10 - Field control programmes

- Growers of produce requiring in-field controls must be registered with AQIS for export to New Zealand.
- This Appendix must be used in combination with other appendices rather than as a stand-alone treatment.
- The treatment/commodity combinations which require grower registration are:

Section - treatment	**Commodity**
3.3 - Methyl bromide fumigation	Watermelon
3.4 - Dimethoate dip/spray	Capsicum, scallopini, cucumber, honeydew melon, tomato
3.11 -Winter window	Rockmelon, honeydew melon, cucumber, watermelon, zucchini, scallopini
3.12 – Irradiation 150Gy	Papaya

Appendix 11 – Winter Window

- All products - growers of "winter window" commodities must register with AQIS to maintain field controls to minimise the risk of fruit fly infestation during production.

Appendix 12 – Irradiation

- Mangoes – growers are not required to be registered with AQIS for goods exported under this treatment pathway.
- Papaya –Growers who elect to irradiate at 150Gy must register for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory 250Gy irradiation).

NOTE: **ALL CARTONS** of produce intended for export to New Zealand must be marked with some form of grower and packinghouse identification to enable traceback.

4.1.2 Summary of Audit Requirements

Grower Audits will be carried out as follows:

Initial year of registration:

- Prior to commencement of harvest

- One additional audit during the growing season.

Where ongoing compliance has been observed and registration is continuous:

- Once during the season.

Winter window - field control programmes

-AQIS will audit blocks/properties and monitoring diaries monthly.

-Where substantial compliance is established, audits will occur every 2 months

If problems are detected at audit and/or AQIS inspection, the frequency of audits will revert to monthly.

4.1.3 Registration Requirements

Growers of commodities (except southern State citrus growers) for which infield controls are required (as per Appendix 10) must be registered with AQIS. The commodities include grapes, capsicums, tomatoes, avocadoes, citrus, cucumbers, honeydew melons, papaya (150Gy irradiation), scallopinis and watermelons. Grower registration for the above commodities will include every block/property used to grow each product.

Growers can register with AQIS either directly or through their packinghouse/exporter. Packinghouses and exporters must forward any grower applications through to AQIS State Offices for inclusion on the regions "master" grower/packer list, following successful audit.

Application for registration will be made to the appropriate AQIS Regional Office (See Appendix 2.1). To ensure there are no delays with processing and completion of registrations, it is recommended applications be forwarded to AQIS no later than 6 weeks before the expected harvest of the first crop. Applications are processed in order of receipt; late applications may be subject to delays. Applications must include a property map showing those blocks in which the relevant NZ BQA commodities are grown.

On receiving application, AQIS inspection staff will visit the property to approve blocks and crops and ensure the grower is aware of their responsibilities. Once approved, growers will be issued a unique grower registration number. AQIS will undertake audits of grower properties throughout the season.

Registered growers who have successfully taken part in the NZ BQA the previous season/year will be subject to one formal audit early in the new harvest season. That is, no initial audit required (subject to AQIS approval) in subsequent years/seasons providing registration and supply to New Zealand has been continuous.

PLEASE NOTE For continual registration, growers MUST notify AQIS of their intent to commence export at least 6 weeks prior to beginning of harvest. Evidence of applicable control measures being carried out (eg spray diaries) must be provided to AQIS prior to export. Failure to comply with these directions may mean growers, irrespective of previous participation, will require an "initial audit" before re-commencement of export.

Packinghouses/exporters who accept grower registrations will be responsible for maintaining all grower documentation to ensure compliance with the SOM. Packinghouses/exporters are also responsible for auditing those growers under the directions contained in the SOM.

4.1.3.1 Responsibilities

Registered growers must maintain spray diaries and implement field hygiene requirements for listed Risk Group 2 and 3 Pests (See Appendix 1).

Growers must apply recommended field controls at least 4 weeks prior to first harvest for New Zealand. Growers are required to conduct field monitoring and keep spray diary records for all activities relating to each block registered for the NZ BQA. The applicable grower declaration form

(Appendices 2.11, 2.13, and 2.14) must be completed for each consignment of product intended for export.

NOTE: The Queensland Department of Primary Industries and Fisheries (QDPI&F) has issued a Farm Note (F76/DEC92) covering the requirements for in-field control programs against infestation of *Bactrocera cucumis.* Although this Farm Note is no longer in print, AQIS will still accept the outlined requirements. Alternatively, AQIS will accept the use of chemicals registered for control of fruit fly providing the treatment is applied at recommended label rates. The recommended label rates will be the minimum standard AQIS measures compliance against. Variations of recommendations in this standard will only be permissible when using an AQIS approved crop monitor. All activities relating to in-field controls must be recorded and held on file for a 12-month period (minimum).

Whilst Citrus Leaf Miner is listed as a Risk Group 2 pest, grower/orchards do not need to undertake specific traceable controls as MAF have accepted it is not a pest of the mature fruit.

Growers are permitted to use the services of AQIS approved crop monitors for the NZ BQA. Should growers use the services of an AQIS approved crop monitor, the grower must still maintain spray diaries showing implementation of any corrective actions undertaken.

Crop monitors will be responsible for ensuring adequate in-field control records are maintained for each registered grower using their services.

Because the field control program is an integral part of the overall treatment for certain commodities, post-harvest security of the produce must be maintained at all stages. See Sections 4.4.5 & 4.4.6 for security requirements.

4.1.3.2 Audit Responsibilities

Grower registration is required for commodities for which Risk Group 2 pests are listed, and for those commodity/treatment pathways making reference to Appendix 10. Registered growers must undertake all the required monitoring and field controls, and keep records of all management surveillance and corrective actions.

AQIS will audit growers of these commodities to ensure compliance with the directions given in the SOM.

The accepting authority for grower registrations will ensure audits are conducted and property records are maintained in accordance with the directions of the SOM.

On application to be a registered grower, AQIS will conduct an “initial” audit of the grower's property and record keeping. Following an initial audit, growers will have at least one other "additional audit" during the growing season.

AQIS audits of grower responsibilities may be conducted simultaneously with packinghouse/ exporter audits.

Should deficiencies be found during the registration period, follow up audits will be required to ensure corrective actions have been completed to enable continued registration. Should a grower not manage the registered property in accordance with the directions of the SOM, and make no

corrective action when deficiencies are detected, the property will be placed under suspension from the NZ BQA.

Where an Agency (other than AQIS) has placed a property under suspension from the NZ BQA, that Agency must inform their AQIS State Office of the suspension at the earliest opportunity. The AQIS State office will advise regional inspection staff and AQIS Canberra at the earliest opportunity.

All audits of growers (AQIS or equivalent), will be "announced audits" giving the grower at least two days notice.

Unannounced monitoring audits may be conducted if, in the opinion of the Senior Inspector (Exports), a need is demonstrated. Unannounced monitoring audits are not chargeable unless a major non-conformance is detected.

AQIS will monitor regularly and audit growers at intervals throughout the season to ensure compliance with NZ BQA requirements. Details of these audits can be found in: A*ttachment 1 Section 4 – Audit Frequency Table*.

4.1.3.3 Grower Audits - Approved Arrangements

Where a packinghouse has an Approved arrangement with AQIS, and is involved in a commodity for which the grower must be registered, the packinghouse must register and audit those growers to ensure compliance with the stipulated field management controls.

AQIS auditing of Approved Arrangement establishments will ensure a sample of registered growers is selected as part of the overall quality system for compliance with the requirements of NZ BQA. If a major non-conformance is detected by AQIS at such grower audits, the suspension of the packinghouse responsible for the grower may be considered.

4.1.3.4 Grower Audits - Non Compliance

A property may be considered to be placed "on notice" of a follow up audit should it be found any of the following may jeopardise its participation under the NZ BQA:

. Inadequate monitoring/spray records

. Insufficient care in disposal or chemical control of past crops

. Evidence of quarantine weeds within the property (not yet seeding). This is of particular relevance to tablegrapes and capsicums, which are subject to this type of infestation,

. Potential cross infestation risks of pest, disease or weed seed contamination from adjoining properties.

. Repeated detection of incomplete documentation presented at AQIS inspection (or found at unannounced audit/routine surveillance)

The time-frame for a follow up audit is dependent on the non-conformance and its relationship to growing/harvesting of the current crop. The Senior Inspector (Exports) will determine whether follow up audits will be required.

4.1.3.5 Grower Suspensions

Growers will be suspended from the NZ BQA if spray and monitoring diaries are not accurately maintained throughout the year or growing season.

All registered growers (excluding southern state citrus) must maintain monitoring and spray diaries of their registered blocks. All monitoring activities of pest and disease (including low infestation levels deemed inappropriate to control with sprays) shall be recorded.

A property will be considered to be either unsatisfactory for registration or, if already registered, "suspended from registration" for any of the following reasons:

. No pest control or monitoring records

. Unacceptable hygiene practices within the property (rotting infested produce) or unsatisfactory control of crops

. Unacceptable hygiene practices from an adjoining property, placing the registered property at risk. For example severe quarantine weed seed build up or past crop/s not being covered or disposed of leading to greater risks of infestation

. Evidence of growers not committed to carrying out the requirements of the SOM

. No corrective action to control quarantine weeds/seeds or pests and diseases

. During a “follow up audit”, it is found the grower has failed to carry out “corrective actions” as detailed when placed “on notice”

4.2 Packinghouse Responsibilities

4.2.1 Summary of Packinghouse Registration Requirements

Appendix 2 – Area free

- All products - Commodities packed for export to New Zealand under area freedom must be registered with AQIS because area freedom is considered to be a treatment.
- Grower registration is not mandatory for all commodities. However, all packinghouses must provide a list of grower's names, addresses and allocated grower numbers for all produce packed for the NZ BQA.

NOTE: in the event fruit fly outbreak suspension zones are implemented within fruit fly area freedom districts, packinghouses must provide a list of growers who are in the declared quarantine suspension zone, and a separate list of growers who remain in the area freedom districts surrounding a suspension zone.

Appendix 3 – Fumigation

- Strawberries - packinghouses are not specifically required to be registered with AQIS under this treatment.
- Watermelons - packinghouses must be registered with AQIS under this treatment for the purposes of maintaining security of the product whilst it is on the packing premise.

Appendix 4 – Dimethoate

- Capsicums - packinghouses must be registered with AQIS under this treatment for the purpose of maintaining security of the product.
- Cucumbers - packinghouses must be registered with AQIS under this treatment for the purpose of maintaining security of the product.
- Honeydew melons - packinghouses must be registered with AQIS under this treatment for the purpose of maintaining security of the product.
- Rockmelons - packinghouses are not specifically required to be registered with AQIS under this treatment.
- Scallopinis – packinghouses must be registered with AQIS under this treatment for the purpose of maintaining security of the product.
- Tomatoes - packinghouses must be registered with AQIS under this treatment for the purpose of maintaining security of the product. Tomato packinghouses are not permitted to pack/treat tomatoes for export to New Zealand unless they have been sourced from registered production blocks.
- Zucchinis - Packinghouses are not specifically required to be registered with AQIS under this treatment.

Appendix 5 - Cold Treatment

- Avocadoes - packinghouses must be registered with AQIS under this treatment for the purpose of maintaining security of the product.
- Citrus fruit – packinghouses of Queensland citrus fruits must be registered with AQIS for export under this treatment because of their responsibilities in maintaining adequate segregation and tracebility methods of the product. Packinghouses for all other states are not specifically required to be registered with AQIS under this treatment.

- Pears - packinghouses are not specifically required to be registered with AQIS under this treatment.
- Table Grapes - packinghouses are not specifically required to be with AQIS under this treatment. Table grape exports are required to undergo mandatory fumigation for the human health pest *Latrodectus hasselti* (Australian Redback spider). If packinghouses are undertaking this fumigation they must be registered for that purpose (Refer to Section 11).

Appendix 6 – Non Host

- Packinghouses are not specifically required to be registered with AQIS for smooth cayenne variety pineapples under this treatment.

All packages of non-host produce being exported under Appendix 6 must be clearly marked with some form of grower and packinghouse identification, and exporter's name and address.

Appendix 10 – Field control programmes

- All products - packinghouses are required to be registered with AQIS under this treatment.

Appendix 11 – Winter Window

- All products - packinghouses are required to be registered with AQIS under this treatment because of their responsibilities in maintaining security of the product whilst it is on the packing premise.

Appendix 12 - Irradiation

- Mangoes – packhouses are not required to be registered with AQIS under this treatment.
- Papaya –Packinghouses are required to be registered with AQIS if papaya is irradiated at 150Gy because of their responsibilities in maintaining security of the product whilst it is on the packing premise.

4.2.2. Summary of Audit Requirements

Application for New Registration

An initial audit will be performed prior to the commencement of the season to ensure the packinghouse has systems in place that will meet the identification, segregation, inspection, security (and where applicable treatments) and recording requirements of the SOM.

At least one additional audit will be undertaken during the packing season.

Continued Registration

At least one audit will be performed during the packing season.

Additional audits may be performed, where non-conformances were detected and a reappraisal of the systems following corrective action may be considered necessary.

4.2.3 Packinghouse Requirements

Packinghouses accepting exporter delegate responsibilities must be registered with AQIS for this purpose.

Packinghouses conducting “treatments” must be registered with AQIS for this purpose in addition to normal packinghouse registration requirements (Refer to Section 4.4 for treatment centre responsibilities).

Packinghouses will maintain secure conditions for NZ BQA commodities and have systems in place to ensure grower identification and segregation is maintained. Packinghouses must ensure commodities with management control requirements for Risk Group 2 pests are segregated to minimise risk of cross contamination.

All cartons of fruits/vegetables for the New Zealand export trade must be marked in some form with grower and packinghouse identification. It is the exporter's responsibility to ensure the exporter name and address is on all packages.

Packinghouses must have records identifying receival of produce from individual growers; and packing and despatch details for each batch/consignment line certified for New Zealand.

All packinghouses must provide a list of grower's names and addresses and designated numbers/codes for NZ BQA produce.

Packinghouses for in-field control commodities are required to source all products from registered growers.

Growers are able to apply for registration either with AQIS, State Departments of Agriculture (or their equivalents), packinghouses or exporters. Where a grower makes application for registration with a packinghouse, the packinghouse is responsible for:

. Making the AQIS State Regional Office aware of the registration/acceptance
. Ensuring all grower requirements (Section 4.1 of SOM) are being complied with
. Maintaining records detailing audits of the grower property/block registered for NZ BQA

4.2.3.1 Inspection Requirements

For all commodities EXCLUDING Tomatoes:
Registered packinghouses must perform a 600-unit grower line inspection for each grower and commodity. This inspection will satisfy requirements for an exporter delegate inspection if performed at the packinghouse, by an approved exporter/exporter delegate. If the packinghouse has not accepted exporter delegate inspection, then there is a requirement for the additional exporter inspection to be conducted prior to AQIS inspection. Inspections must be recorded (Refer to Appendix 2.6) and retained for audit purposes. A copy of the inspection report must accompany the consignment to the export loading point

Tomatoes grown in areas outside of “fruit fly area freedom” areas
Each grower processing run is subject to a 1000 unit inspection. This must be drawn randomly across the processing run at regular intervals (maximum run time 24 hours). Inspections must be recorded (Appendix 2.6) and kept for audit purposes. There is a **NIL** tolerance for all stages of live fruit flies. Should any stages of live fruit flies be detected, the entire processing run is rejected.

AQIS are to be informed of fruit fly detections and the grower must undertake corrective action. AQIS will audit corrective action prior to the recommencement of harvest for New Zealand to ensure conformity. The 1000 unit processing run is to be done **in conjunction with** the 600-unit grower line inspection and the 600-unit exporter delegate inspection. **The 1000 unit inspection does not replace either of these inspections.**

Tomatoes grown outside "fruit fly freedom" must be clearly and visibally marked "for New Zealand" on all four sides of the pallet.

Tomatoes grown in "fruit fly freedom" areas
"Fruit fly area freedom" tomatoes are exported under Appendix 2 of the SOM and must comply with the requirements listed for this pathway.

4.2.3.2 Documentation

Packinghouses are responsible for maintaining all documentation and must provide to AQIS the following upon request:

i. Packinghouse registration form
ii. List of growers registered with AQIS
iii. receival/despatch records of commodities

A copy of the Inspection Record together with other documentation relating to the shipment will be held on file for 2 years (minimum) and are subject to AQIS/MAF audit.

Where an exporter has delegated inspection requirements to a packinghouse, and where that packinghouse requires AQIS to undertake inspection on premise, the packinghouse will provide copies of the delegation request and confirmation as required under Section 4.6.3.4. ???

4.2.3.3 Security and Supervision Responsibilities

Where a packinghouse has been delegated and accepted exporter responsibilities in accordance with directions contained in Section 4.6.3 of the SOM, the packinghouse must undertake and record all functions so delegated to them. Delegated responsibilities may include;

. The security of cleared/treated produce whilst on premise

. Supervision of loading and unloading of all consignments into and out of the packinghouse premise

. Clear identification of all New Zealand destined produce

. Documenting all incoming and outgoing produce intended for export under the NZ BQA

The exporter/exporter delegate will arrange appropriate transportation of cleared treated products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of delegation acceptance on file.

Full details of the secured product will be included on a Transfer Certificate (EX 186) and/or Notice of Intention (EX 28). A transfer certificate is to be issued for all prouct travelling interstate. For intrastate travel, a documented pathway is to be approved by the Senior Inspector

(Exports) in each region. This process will be audited by AQIS.

4.2.3.4 Packinghouse Audit Responsibilities

The frequency of packinghouse audits will be at the discretion of the Senior Inspector (Exports). Generally there will be a minimum of one audit per packing season and where seasons are longer than 4 months, it is recommended a second audit be scheduled for that year (Refer to *Attachment 1, Section 5 – Audit Frequency Table*).

All packinghouses affiliated with NZ BQA commodities will be audited annually (minimum) for compliance with grower registers, staff training, completion and storage of records and security responsibilities. Records pertaining to these aspects will be checked for accuracy at audit. Variance to audit requirements can be made at the discretion of the Senior Inspector (Exports).

Packinghouses involved in physical or chemical disinfestation treatments for the NZ BQA will be subject to auditing requirements against the directions contained in Section 4.4 of the SOM.

A packinghouse accepting exporter delegation duties will be audited to ensure all such inspections have been conducted in accordance with the directions of the SOM, and appropriate records have been maintained and filed.

Where packinghouses are registered under two or more of the above criteria, audits of each element requiring registration will be conducted in one audit.

If a packinghouse audit detects minor non-conformities, the packinghouse will be required to address the concerns, and a follow up audit will be scheduled within 7 days. If a packinghouse audit detects major non-conformance/s, consideration will be made as to whether the packinghouse should be suspended until the required corrective action has been implemented and successfully re-audited. The Senior Inspector (Exports) will have the authority to assess and implement the necessary actions, depending on the circumstances surrounding a non-conformance against the systems.

The basis of all audits is to ensure the packinghouse is performing its responsibilities for those commodities/treatments/inspections under the NZ BQA and the directions of the SOM.

Approved Arrangement packinghouses will be audited for compliance with the NZ BQA under their existing audit programs.

All audit time will be charged to the packinghouse involved.

4.2.3.5 Packinghouse Audits Non Compliance

AQIS may deregister a packinghouse from the NZ BQA if the packinghouse:

- Is sourcing fruit/vegetables from unregistered growers when it is a requirement of the SOM for growers to be registered
- Does not have procedures in place for identifying commodity specific registered grower/s
- Does not mark packages with a registered grower and packinghouse number
- Does not have procedures in place to segregate commodity specific growing lines through the packing process, (including area freedom treatment commodities)

- Does not have trained packing staff operating at the time that can recognise pests, disease and weed seeds of concern to New Zealand
- Does not have procedures in place to deal with suspect fruit with a sting, rot or bruise
- Do not comply with accepted delegator inspection responsibilities
- Do not comply with any other directions contained in the SOM.

4.2.3.6 Suspension of Packinghouse Registration

AQIS may suspend a packinghouse from the NZ BQA program should it not to be performing it's responsibilities in the required manner. Such suspension may be restricted to trade for the NZ BQA arrangement only.

Packinghouses, that do not have sufficiently trained staff, appropriate segregation, security, identification procedures, or detailed records of New Zealand packing arrangements, may be subject to suspension.

4.3 Approved Arrangements – Packinghouse Responsibilities

4.3.1 General Requirements

All fruits/vegetables for NZ BQA must include grower numbers or equivalent codes and packinghouse numbers on each individual package. It is the exporter's responsibility to ensure the exporter name and address is on all packages.

Packinghouses located in declared fruit fly free areas must have a register of all growers' names and addresses and allocated grower numbers for all NZ BQA commodities.

Should packinghouses located in fruit fly area freedom districts become involved in area freedom suspension zones, packinghouses must be able to provide separate registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals are required to show procedures for identification, segregation and packing processes to ensure "area free" commodities cannot be contaminated whilst on the establishment and/or surrounds.

It is recommended packing establishments have contingency plans within their quality manuals to address additional procedures required in the event of fruit fly outbreaks in their district. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

Approved Arrangement packinghouses may incorporate NZ BQA arrangements into their Quality Manuals and be audited in conjunction with normal auditing requirements.

Approved Arrangement packinghouses not undertaking official disinfestation treatments and that do not have Risk Group 2 or 3 pests, will not need any additional systems to their Quality Manuals.

Approved Arrangement packinghouses with Risk Group 2 or 3 pests will need to ensure grower registration, commodity segragation, identification and inspections meet the NZ BQA. It is likely some Approved Arrangement Manuals will need to be amended or have attached an appendix to meet the new export requirements for NZ BQA.

Packinghouses seeking Approved arrangement accreditation for the NZ BQA must have 5 joint inspections with AQIS to assess the ability of packinghouse staff to undertake inspections in accordance with the directions contained in the SOM.

Approved Arrangement packinghouses conducting "treatments" under the NZ BQA must be registered for this purpose in addition to normal registration requirements. Section 8 of the SOM outlines the requirements for Treatment Centres.

4.3.2 Auditing for New Zealand Requirements

Approved arrangement packinghouses with NZ BQA responsibilities incorporated into their current Quality Manuals will be audited in conjunction with standard auditing requirements.

Approved Arrangement packinghouses choosing to separate NZ BQA commodity responsibilities from other approved arrangement accreditation will have the two systems audited separately but within the usual audit schedules applying to the establishment.

Approved Arrangement packinghouses responsible for registered growers that have Risk Group 2 pests, will have a percentage of those registered growers audited to ensure compliance with the NZ BQA.

Packinghouses who elect to register growers of commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. On initial registration,
. Following registration, at least once during the growing season; and
. Continual registration- once during each growing season.

For AQIS Approved arrangement audits, registered NZ BQA growers will be randomly selected on the following basis;

. Initial year of registration - 5% of all growers registered by the packinghouse
. Subsequent growing seasons- 2.5% of all growers registered by the packinghouse (subject to compliance from previous year)
. Non-conformance at a previous audit -10% of all growers registered by the packinghouse

Should a major nonconformance be detected at audit, the packinghouse will be suspended from the NZ BQA immediately. Depending on the type of nonconformance, suspension from the AQIS approved arrangement may be considered. Such a decision will be made by the AQIS Approved Arrangement Contact Officer in conjunction with the State Regional Manager and Central Office.

4.3.3 Approved arrangements - New Zealand Inspection Requirements

Approved arrangement packinghouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted when the Approved Arrangement establishment has systems in place that;

. Address grower field controls (horticulture extension officers, reference to crop monitors etc.)
. Have some type of formal receival inspection records
. Have sorter and grader recording systems within the processing line.

In order to properly document inspections for NZ BQA commodities, Approved Arrangement packinghouses will undertake “in-line” consignment inspections according to the following table;

TABLE 7

DETERMINING SAMPLE REQUIREMENTS
ACCREDITED AQIS approved arrangement ESTABLISHMENTS
IN-LINE PROCESS CONTROL

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 7 sets out sampling regimes that can be applied as in-line process controls within an Approved Arrangement packinghouse. The maximum continuous time run for New Zealand is a 24 hour process. It is extremely important this type of in-line process control is undertaken and recorded for each consignment run of NZ BQA commodities.

All in-line process controls (Table 7) must be undertaken by an AQIS Approved Inspector. Where inspections are performed as per Table 7, individual grower line inspections are not required.

During inspection, any fruits/vegetables that are soft, bruised or display rot spots will be cut to determine evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all produce cut will be recorded on the inspection sheets.

Packinghouses can make up any type of sampling system based on Table 7. **However**, packinghouses must document what regime is to be used before the initial production run and ensure the sampling regime is representative of the consignment/s being assembled.

The packinghouse requirements covered in Section 6 of the SOM pertaining to identification, segregation, security and records for all NZ BQA produce must be part of the Process Management System submitted for AQIS approval.

4.3.4 Documentation

The identity of the exporter, in addition to the grower and packinghouse numbers will be included on all packages covered by the NZ BQA.

For produce being transferred intrastate or interstate, documentation will be required to ensure the receiving company and AQIS inspector can verify security and integrity of the consignment on arrival. A declaration to the following effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28), EX 222, EX186 (if appropriate), or in the Exporter Declaration/Comments box of an RFP as follows:

"The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by MAF and specified tolerances have not been exceeded."

Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

4.3.5 Post treatment Security

Where an Approved Arrangement packinghouse has accepted exporter delegation for the security and loading supervision of NZ BQA commodities, the packinghouse will nominate the person/s who will be responsible for carrying out and recording the following:

. The security of cleared/treated produce whilst on the premises

. Supervision of loading and unloading of all consignments into and out of the premises intended for export under NZ BQA

. Clear identification of all NZ BQA produce

. Documenting all incoming and outgoing produce intended for export to New Zealand

The exporter/exporter delegate will arrange appropriate transportation of certified NZ BQA products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of acceptance of duties on file.

For product not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28) and signed by an AQIS inspection officer.

4.4 Treatment Centre Responsibilities

4.4.1 Summary of Treatment Centre Registration Requirements

Appendix 2 - Area free
- There are no treatment centres associated with the area freedom pathway. Approved State government surveys are deemed to be the treatment.

Appendix 3 - Fumigation
- Strawberries and watermelons - fumigation treatment centres must be registered with AQIS for this pathway. Only persons licensed for this purpose can perform fumigations.

Appendix 4 - Dimethoate
- All products - dimethoate dip/spray treatment centres must be registered with AQIS for this pathway.

Appendix 5 – Cold Treatment
- All products - cold disinfestation treatment centres must be registered with AQIS for this pathway.

Appendix 6 – Non-Host
- There are no treatment centre requirements.

Appendix 10 - Field control programmes
- Methyl bromide fumigation and Dimethoate dip/spray treatments are to be used in conjuntion with this appendix

Appendix 11 – Winter Window
- There are no treatment centre requirements.

Appendix 12 – Irradiation
- All products - irradiation treatment centres must be registered with AQIS for this pathway.

4.4.2 Summary of Treatment Centre Audit Requirements

Fumigation Centres
An annual audit is to be conducted in the first 10 days of each season (during treatment) to verify treatment centre operators are trained in their responsibilities. For fixed chambers – additional audits will be conducted 2-3 times during season.

Cold Storage Centres
An annual audit is to be conducted for the first three treatments of each season to verify all treatment centre responsibilities are being maintained.

Dimethoate Treatment Centres
An initial audit is to be conducted during the first 10 days of each season to verify all responsibilities are being maintained. In the first year of operation, monthly audits are required during the operating season. For treatment centres that have had successful audits in the first year, two audits per year/season thereafter will be undertaken, as long as compliance is being maintained.

All Treatment Centres
Should non-conformances be detected during audit schedules, additional audits may be required to ensure corrective actions have been implemented.

Should major non-conformances be detected during audit, the treatment centre may be suspended from NZ BQA until AQIS is satisfied corrective action has been implemented and non-conformance will not reoccur.

4.4.3 Treatment Centre Responsibilities

4.4.3.1 Process Controls

All treatment centres registered for NZ BQA must have an auditable documented system of process controls and record keeping. Treatment centres must have systems of identification, segregation, process controls, post security treatment and supervision responsibilities when loading produce either direct to export or through exporters/freight forwarders.

Persons who are responsible for calibrating, measuring and recording will be appropriately trained to undertake these responsibilities.

Should any stages of live fruit fly be found during AQIS or export inspections following treatment, the treatment centre will be suspended immediately and an audit will be conducted to determine the reason for the failure.

Should any stages of live fruit fly be found during MAF import inspections, the particular treatment pathway will be suspended immediately until an AQIS audit determines the reasons for such failure, and MAF accept the findings.

Note: the Senior Inspector (Exports) has the authority to vary the above audit requirements on the basis of compliance with the operating instructions of the SOM. In the case of continued compliance, audit intensity may be reduced whereas for marginal or repeated non-conformance, intensity may be increased.

4.4.3.2 NZ BQA Treatments - AQIS Supervision

Treatment centres will be subject to the following AQIS supervision;

Fumigation Centres
- Flexible Tents- AQIS inspection staff will attend all fumigations being undertaken for NZ BQA. Inspection staff will attend either at commencement of fumigation or prior to completion. AQIS will verify treatment dosages, calculations and gas retention general process controls.

- Fixed Capacity (chambers or fixed tents)-Treatment centres will be audited at the commencement of the season, and then, providing substantial compliance 2 - 3 times during the season.

Fumigation centres must advise their regional AQIS office 24 hours in advance of intended fumigation treatments. If AQIS is unable to attend at the required times, arrangements can be to allow treatment to go ahead but define how AQIS will manage the supervision requirements.

Cold Storage Centres
AQIS will undertake supervision of each cold disinfestation treatment. Generally, AQIS will be required to be in attendance when sensors and probes are calibrated, both prior to and at the completion of each treatment. Inspection staff will also attend cold disinfestation treatments (normally about halfway through), to ensure temperature recording is being maintained in the required manner.

For cold storage centres using manual recording devices, AQIS inspection staff will monitor the disinfestation treatment every 3-4 days.

Dimethoate Treatments
Waxed produce
The application of waxes or oils prior to dimethoate treatment is prohibited for export of produce to New Zealand. For produce that has completed the disinfestation treatment and completely dried, application of waxes or oils will only be allowed at the discretion of the Senior Inspector (Exports).

AQIS requirements
There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment. AQIS inspection staff will undertake analysis of chemical dipping strengths on the following basis;

. First year of NZ BQA registration

- Monthly during the treatment season.

. Continuous NZ BQA registration without non-conformance

- Twice during the treatment season.

For tomatoes the analysis requirements are as follows:
AQIS will initially undertake sampling monthly; this can be extended to 2 months when compliance has been established.

Treatment centre are required to submit samples for analysis to a recognised agency monthly. Results of these analyses will be retained and made available to AQIS inspection staff upon request.

Treatment centres performing dimethoate dipping/spraying are required to have a recognised agency analyse the concentration of Dimethoate used in their dips/sprays. This will be undertaken monthly during the first 3 months of the treatment season, followed by an additional sample if the treatment season extends beyond 4 months.

4.4.3.3 Treatment Centre Audit Responsibilities

AQIS must ensure:

- Treatment facilities are maintained in a condition that will provide efficacy in treatment programs.
- All measurement gauges are calibrated regularly, and records are maintained to verify this.
- All movement of treated produce is documented, particularly in relation to load-out activity.
- Product security is maintained at all times.

4.4.3.4 Treatment Centre Audits Non Compliance

If monitoring/audit checks reveal non-conformances of a treatment centre, an official audit must be scheduled as soon as possible to instigate corrective action. Findings that may lead to suspension of a registered treatment centre or increased audit scheduling under the NZ BQA program will include:

- Insufficient/improper identification of treated and untreated product
- Incorrect treatments
- Unacceptable documentation
- No calibration or records of calibration regarding measuring equipment
- No segregation of treated/untreated product
- Product not correctly identified for New Zealand
- Product not properly secured after treatment
- Non-compliance with any other directions contained in the SOM

All audit time is to be charged to the treatment centre involved.

4.4.4 Treatment Details

4.4.4.1 Appendix 3 - Fumigation

All fumigations must be performed with the amount of product space equal to or less than 50% of total air space within the chamber/tent. Fumigation treatment requirements are as detailed in Table 4.

TABLE 4
METHYL BROMIDE FUMIGATION
TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21 - 26°C and above	32g/m^3	Watermelon - 4 hours
15°C and above	48g/m^3	Strawberry - 3 hours

In addition to standard AQIS registration for treatment centres, the following additional requirements must be in place before registration for the NZ BQA program.

All NZ BQA produce requiring fumigation must be managed in accordance with the following process controls. Fumigation treatment centres must be able to demonstrate at all times the following requirements are being met:

1. Incoming product identification.
2. Segregation from other produce and clearly marked “New Zealand”
3. Treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment. i.e. Batch numbers
4. Documented treatment records
5. How measuring equipment is calibrated, how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.
9. If required, maintenance of inspection facilities on the premises.

In accordance with the above requirements, fumigation treatment facilities must develop a set of procedures clearly defining the responsibilities and work duties of all staff involved in the fumigation of watermelons or strawberries.

It is recommended fumigation establishments write procedures for each of the above requirements, detailing who is responsible for the activity (it can be more than one person as long as all persons know their duties in each category), when the activity is done, what records are made and where these records will be filed.

With regard to Item 3, it is recommended individual procedures accompanied by work instructions be written to define the processes and controls. The following criteria should be considered:

- Address how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent,
- Define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.
- How many units will be sampled to measure lowest flesh temperature of product?
- If tent fumigation is being performed, by whom and when is the tent checked for holes/tears?
- Who, how and when is temperature measuring equipment calibrated? How is this recorded?
- Where the in-process gas monitoring lines are located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?
- Who checks required fumigation dosage rate once temperature and volume are calculated?
- How is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?
- Who is responsible for checking the correct amount of fumigant is entered into the chamber/tent?
- What procedures are applied to ensure no leaks from the chamber or tent are evident?
- What period of time after initial fumigant is released into the chamber/tent will verification readings be made and using what type of equipment?
- Calibration of gas measuring equipment is undertaken how frequently and who does this?
- Calibration details are recorded where?
- At completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?
- Who has the authority to sign off the treatment certificates to enable release of produce?
- How is product identified as being treated?

All fumigations undertaken using flexible tent capacities will be subject to AQIS supervision and monitoring procedures to ensure the requirements as directed above are being undertaken effectively. Fumigations performed in fixed capacity chambers or tents will be monitored by AQIS at frequent intervals during the fumigation season.

It is recommended treatment centres submit a process control manual for AQIS assessment when applying for registration to enable NZ BQA registration and process controls to be assessed simultaneously.

NOTE: Although growers and packinghouses associated with strawberry production and packaging do not need to be formally registered for NZ BQA, each package must be clearly marked with some form of grower and packinghouse identification, along with the exporter's name and address.

Where treatments have been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on the Transfer Certificate (EX 186) or Notice of Intention to Export/Export Permit (EX 28).

NOTE: Senior Inspectors (Exports) may approve variations to the above documentation requirements to suit a particular State's operating requirements. The use of facsimiles for transferring this information is permitted. Where unofficial AQIS documentation is used, it is recommended regular audits of the system take place to ensure confidence.

The mutual fumigation recognition arrangement between Australia and New Zealand (as defined in PHYTO) is for surface feeding pests only (Risk Group 1) and cannot be used if any stages of live fruit fly (Risk Group 3) are detected. Some Risk Group 2 pests may be treated by fumigation (if applicable). Where this occurs other procedures outlined in the SOM must be followed. Detections of any stages of live fruit fly must be treated in accordance with the procedures outlined in the SOM. The mutual fumigation recognition arrangement is only to be used when regulated pests are detected. This arrangement cannot be used as a pre-emptive measure. Please refer to PHYTO for more information.

4.4.4.2 Appendix 4 – Dimethoate

Dimethoate dipping/spraying requirements are detailed in table 5.

TABLE 5

PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES FOR COMMODITIES EXPORTED UNDER APPENDIX 4 TO THE NZ BQA

Commodity	Dip strength	Tolerance	Dip/spray	Time
Tomato	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Tomato	400ppm	±6% (±24ppm)	Spray	Spray for at least 10 seconds, and remain wet for at least 1 minute
Capsicum	400ppm	±6% (±24ppm)	Spray	Spray for at least 1 minute
Zucchini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Rockmelon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Cucumber	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Scallopini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute

Treatment centres using dimethoate sprays/dips for NZ BQA produce must be registered with AQIS for this purpose. When applying for registration, treatment centres should present a procedures manual detailing how their process controls will be implemented. The details of process controls must be in place as follows:

- Chemical to be from fresh stocks and certainly not older than 18 months,
- Chemical to be stored at temperatures below 40°C. It has been determined when temperatures rise above 46°C (for even 1 day), the active ingredient will degrade and solution strength will be lessened.
- The use of oils or waxes prior to chemical dipping treatment is prohibited.
- All products being treated with chemical dip will be free of soil.

- The chemical dipping process must be the last preparation process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted, following dip treatment.
- The packinghouse/treatment centre will nominate a person/s to undertake the making up of dimethoate solutions and the recording of each consignment or batch lot treated and packed for NZ BQA.
- The nominated person/s must satisfy AQIS they are able to correctly determine the make up of chemical solution strengths, before a packinghouse/treatment centre will be permitted to chemically dip/treat fruits destined for New Zealand.
- The packinghouse/treatment centre will make up chemical solutions immediately prior to use and have systems in place for recording solution strengths. The packinghouse/treatment centre will also record details of the mixing of solution and any topping up during processing which allows for chemical wash out. Details will include times and indicate volumes of product treated at the time of topping up.

Each treatment operator will be required to document their method/s of dipping and must include:

- Size of the dip tank
- Method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc)
- Maximum volume of water required for any/each treatment
- Amount of chemical needed to achieve the required ppm level active ingredient
- Minimum allowable solution level
- Maintenance of active ingredient level (i.e. "top up" levels)
- Treatment operators will have a system in place identifying treated and untreated products. Labels must be clear and visible on pallets/bins/crates etc
- After dipping, all products must be identified as being "treated".
- Immediately following completion of treatment, each pallet of tomatoes must have cards affixed to all four sides signifying it is destined for New Zealand.

NOTE: When the processing of any batch is completed, the solution will be completely disposed of. Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems demonstrating solution can be carried over without losing effectiveness.

4.4.4.3 Appendix 5 – Cold Treatment

Table 6 details the permitted temperature and times for cold storage disinfestation treatments.

TABLE 6
APPROVED COLD STORAGE
DISINFESTATION TREATMENTS

Commodity	Temperature	Period
Pear, tablegrape, citrus fruits (option 1)	≤ 0°C	13 days
Pear, tablegrape, citrus fruits (option 2)	1°C (± 0.6°C)	16 days
Avocadoes	1°C (± 0.2°C)	16 days

Cold disinfestation procedures

Registered treatment centres must have documented procedures in place for receival, identification of grower/packinghouse, segregation and identification of all NZ BQA produce.

The following requirements must be in place to enable cold storage treatment centres to become registered for the NZ BQA program:

- Minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of product or less. For each additional 250 cu.m. of product, or part thereof, one additional pulp sensor will be used.
- Thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to operational staff.
- The warmest area of each cool storage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One pulp sensor will be placed at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors.
- For operators of Controlled Atmosphere Cool Stores (pome fruits), records must be available which detail 16 continuous days of treatment at 1°C ± 0.6°C or 13 continuous days of treatment of 0°C or below during the storage period.

Temperature recording

The following temperature recording requirements must be available before treatment centres will be registered for NZ BQA commodities:

- Continuous - strip charts or data log sheets for each cold treatment. Note: temperature recorders must be capable of monitoring pulp temperatures—Ryan, Cox or similar. Air temperature recorders are not acceptable.
- Intermittent - sensor temperatures will be manually recorded twice daily (morning and afternoon) for each cold treatment and verified once every 4 days by AQIS.

Temperature records will be retained and made available for auditing purposes by AQIS/MAF upon request.

NOTE: Where the refrigeration unit is equipped with a print out recorder, AQIS will initiate treatment once the chamber has stabilised at the required temperature. AQIS will verify and sign satisfactorily completed treatment records. Both AQIS and the treatment facility are to maintain copies of the treatments on file.

Record requirements

Details to be recorded include:

- Date and results of sensor/probe calibrations
- Date chamber was loaded with produce
- Type and variety of produce treated, the quantity by lots involved, all to be identified by packinghouse and exporter.
- Date the maximum pulp temperatures initially recorded 1°C ± 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded. Or, date the pulp temperature of the fruit within the chamber recorded 13 days at 0°/below or equivalent.
- Either continuous print out records or daily records of a.m. and p.m. temperatures within the chamber throughout the treatment program.

- Date produce was cleared from chamber with details of post treatment security and dispatch of produce.
- Date and results of re-calibration of sensors following completion of treatment.

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- Security of treated produce whilst on the premises.
- Supervision of loading and unloading of all consignments into and out of the premises
- Identification and segregation of consignments intended to be treated for NZ BQA.
- Documenting all incoming and outgoing produce intended to be exported to New Zealand.

The nominated person/s can be either the exporter delegate or the operator of the treatment establishment.

The exporter/exporter delegate will arrange appropriate transportation of cleared treated products to ensure no cross infestation or product substitution can occur.

The exporter/exporter delegate will ensure the transport medium is clean and other products (i.e. unsecured packages of untreated commodities) that could cause cross infestation are not loaded without taking appropriate security precautions.

Where treatments have been performed in other than the exporters own premises, and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28).

4.4.4.4 Appendix 12 – Irradiation

The treatment rate specified by MAF for mangoes exported from Australia is Dmin 250Gy.

The treatment rate specified by MAF for papaya exported from Australia is Dmin 150Gy. New Zealand MAFF requires Australia to undertake appropriate pest control activities for the *Conogethes punctiferalis* (yellow peach moth) prior to export.

The Food Standards Australia & New Zealand (FSANZ) standard for irradiated tropical fruits has a Dmax of 1000gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au

Registration

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, all establishments who undertake either physical or chemical treatments for the disinfestation of fruit flies for export of host commodities to New Zealand must be registered specifically for this purpose. Application for registration will be made directly to AQIS Regional Offices in the State where registration is required.

Process Controls

All treatment centres registered for the NZ BQA trade must have an auditable system of process controls and record keeping.

Treatment centres must have systems which demonstrate identification, segregation, process controls, quarantine secure areas or quarantine secure packaging following treatment; and supervision responsibilities when loading produce either direct to export or through exporters/freight forwarders.

Treatment centres will be required to carry out verification testing to determine the required response on target organisms has been achieved in accordance with International Standard Phytosanitary Measures (ISPM) # 18 - *Guidelines for the use of irradiation as a phytosanitary measure* (www.ippc.int). The records of this verification must be made available to AQIS/MAF upon request.

Persons who are responsible for calibrating, measuring and recording will be appropriately trained to undertake these responsibilities.

Irradiation treatment procedures

Registered treatment centres must have documented procedures in place for receival, identification, segregation, despatch and identification of NZ BQA produce.

Ionizing radiation may be provided by radioactive isotopes (gamma rays from cobalt-60), electrons generated from machine sources (up to 10 MeV), or by x-rays (up to 5 MeV) (limits set by Codex Alimentarius). The unit of measurement for absorbed dose is gray (Gy).

Treatment procedures must ensure the minimum absorbed dose (Dmin) is fully attained throughout the commodity to provide the prescribed level of efficacy. Owing to the differences in the configuration of treatment lots, higher doses may be required to ensure the Dmin is achieved throughout the configured consignment or lot; these doses must not exceed the Dmax.

In addition to the normal AQIS (and State) registration requirements pertaining to relevant treatment centres, the following additional requirements must be in place before registration for the NZ BQA program is permitted.

Where any treatment has been performed in other than the exporter's own premises and the product is not being loaded for direct export shipment, a documented system (pathway) must be supplied to the Senior Inspector (Exports) prior to season commencement outlining security procedures and product movement. This system will be subject to random monitoring throughout the season. If goods are travelling interstate then a transfer certificate (Ex 186) endorsed with relevant additional declarations pertaining to the goods will be issued.

NOTE: Senior Inspectors (Exports) may approve variations to the above documentation requirements to suit a particular State's operations. The use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is used, it is recommended audits be undertaken frequently to enable confidence within the systems.

The following specific requirements must be in place to enable irradiation treatment centres to become registered for the NZ BQA program:

Dosimetry

Dosimetry ensures the required Dmin for a particular commodity was delivered to all parts of the

consignment. The following conditions for dosimetry systems must be in place:

- Capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax)
- Calibrated in accordance with international standards or appropriate national standards (ISO/ASTM 51261 "Selection and Calibration of Dosimetry Systems for Radiation Processing", ISO/ASTM 51204 "Dosimetry in Gamma Irradiation Facilities for Food Processing" and ASTM guide - F1355 "Irradiation of Fresh Fruits as a Phytosanitary Treatment", and ISPM 18)
- Appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
- Evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
- Consider variations due to density and composition of the material treated, shape and size, orientation of the product, stacking, volume and packaging;
- Dose mapping of the product in each geometric packing configuration, arrangement and product density used during routine treatments must be carried out prior to the approval of the facility. Only configurations approved by AQIS can be used for actual treatments;
- All components of the dosimetry system must be calibrated according to documented standard operating procedures. An independent organisation recognized by AQIS should assess performance of the dosimetry system;
- An accurate measurement of absorbed dose in a consignment is critical for determining and monitoring efficacy and is part of the verification process. The required number, location and frequency of these measurements should be prescribed based on the specific equipment, processes, commodities, relevant standards and phytosanitary requirements.

Dose Mapping

- Dose mapping studies must be conducted to fully characterize the dose distribution within the irradiation chambers and commodity, and demonstrate the treatment consistently meets the prescribed requirements under defined and controlled conditions. Dose mapping data from a minimum of three runs on any particular configuration must be provided to AQIS for verification of Dmin points etc. A minimum of three runs in a physical configuration is required for verification of Dmin (standard).
- Dose mapping must be done in accordance with documented (proven) standard operating procedures. The information from the dose mapping studies is used in the selection of locations for dosimeters during routine processing.
- Independent dose mapping for incomplete (partially-filled) as well as first and last process loads is required to determine if the absorbed-dose distribution is significantly different from a routine load and to adjust the treatment accordingly.

Record requirements

Facility records and traceability

Treatment facility operators must keep and maintain records addressing the areas listed below.

- Appropriate treatment records for phytosanitary purposes must be kept by the irradiation facility to ensure traceability of treated lots. Records for every treatment must be kept.
- Dosimetry records must be kept by the treatment facility for at least one full year after treatment. Records must be made available to AQIS on request.

Records kept by treatment centres should also address the following:
- Identification of facility and responsible parties
- Purpose of treatment
- Target regulated pest(s)
- Lot size, volume and identification, including number of articles or packages
- Identifying markings or characteristics
- Quantity in lot
- Absorbed doses (target and measured)
- Date of treatment
- Observed deviations from treatment specification.

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- Security of treated produce whilst on the premises.
- Supervision of loading and unloading of all consignments into and out of the premises,
- Identification and segregation of consignments intended to be treated for NZ BQA.
- Documenting all incoming and outgoing produce intended to be exported to New Zealand.

The nominated person/s can be either the exporter delegate or the operator of the treatment establishment.

The exporter/exporter delegate will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

The exporter/exporter delegate will ensure the transport medium is clean and other products (i.e. unsecured packages of untreated commodities) that could cause cross infestation are not loaded without taking appropriate security precautions.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28).

4.4.4.5 Tablegrape Fumigation Requirements – Treatment for Disinfestation of Redback Spiders - *Latrodectus hasselti*

The New Zealand Ministry of Health have declared Australian Redback spiders a pest of human health concern, and requested MAF ensure all consignments of tablegrapes arriving in New Zealand do not have any live pests of this type.

MAF have directed AQIS to either undertake stringent field control programs to eliminate this pest or an agreed treatment effective against Redback spiders. A sulphur dioxide - carbon dioxide fumigation treatment has been accepted for this purpose.

The Australian tablegrape industry has opted for mandatory fumigation.

Treatment details

The mandatory fumigation treatment for Redback spiders is a **mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes**.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

Fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Fumigation applied to tablegrapes must meet the listed criteria detailed in Section 3 of the SOM (Fumigation treatment centres requirements and responsibilities).

AQIS inspection staff must sight fumigation treatment records to enable phytosanitary certification of tablegrapes. Treatment records must clearly identify the product, date of treatment, dosage rate and application time of the fumigant. The records must also provide exporter details (where known), packing establishment and grower number details.

Tablegrape fumigators will be audited for compliance with this Section and Section 3 of the SOM.

Traceability

If a live Redback spider is detected during inspection of NZ BQA table grapes, systems must be in place to ensure traceability back to individual fumigation treatments.

The choice of system is at the packinghouse/treatment centre's discretion. AQIS suggests packinghouses/treatment centres implement a pallet card system in which a time/date is recorded on the pallet card correlating with the treatment time/date.

If produce is drawn from a number of fumigation batches to make up a pallet, each block of cartons must be identified to enable traceback to individual fumigations.

Additional precautionary measures

Unused packaging carried over to the following season presents an additional pathway for the introduction of Redback spiders into New Zealand.

Accordingly, measures must be implemented to ensure Redback spider introduction into New Zealand is minimised. When carrying unused table grape packaging over, either pest-proofing or disinfestation of the packaging is necessary. AQIS recommends pest-proofing packaging, preferably by means of shrink-wrapping.

Should pest-proofing not be a viable option, disinfestation must take place prior to packaging. The accepted treatment, by New Zealand, for Redback spiders is a mixed fumigation treatment of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes. Carried over packaging must be subject to this treatment before packing table grapes.

At the beginning of the table grape season, AQIS staff will randomly check packinghouses are undertaking these requirements.

4.4.5 Post Treatment Security

4.4.5.1 Appendix 2 - Area free

All area freedom commodities being loaded for export outside that district must be fully secured at all times. Approved security measures for transporting of produce will include either;

. Fully shrink-wrapping each pallet of produce (including the surface area between the bottom row of cartons and the actual pallet),
. Fully enclosing each pallet with shade mesh cloth with a maximum opening of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),
. Loading direct into panotech vans with units sealed by AQIS officers.

4.4.5.2 Appendix 3 – Fumigation, Appendix 4 – Dimethoate

Immediately following labelling of packaging, produce must be secured by either:

- Shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet).
- Shade cloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom.
- Cool storing unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product.
- Cool storing protected in secure packages at any temperature.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Senior Inspector (Exports) for assessment and approval.

4.4.5.3 Appendix 5 – Cold Treatment

Once cold-disinfestation treatment has completed, the product must be maintained in such a way to prevent reinfestation and substitution.

4.4.5.4 Appendix 6 – Non-Host

All smooth cayenne variety pineapples must be secured and protected against substitution or reinfestation at all times.

4.4.5.5 Appendix 11 – Winter Window

Packinghouses must identify "winter window" receival immediately. The product must be secured and segregated from all other produce, regardless of whether other commodities are for export or domestic markets.

Following packing, the produce must be immediately secured against reinfestation and substitution. Security can be undertaken as per Appendix 10 of the SOM.

4.4.5.6 Appendix 12 – Irradiation

Once treatment has been completed, the product must be maintained in such a way to prevent reinfestation and substitution.

4.4.6 Post Treatment Transportation of Product to Export Loading Point

4.4.6.1 Appendix 2 - Area free

All consignments shipped out of Area Freedom Districts will be covered by either a Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (EX 28). Exporters will submit a documented pathway. Each consignment transfer must be inspected on arrival by AQIS officers to verify the security of the consignment/s. When substantial compliance has been achieved, inspection arrival may be performed on a random basis.

Should inspecting officers find breaches to security during transit; consignments will be rejected for area freedom certification. Rejected produce may be allowed disinfestation treatments (per SOM directions), as a corrective action should the exporter choose this option.

4.4.6.2 Appendix 3 – Fumigation, Appendix 4 – Dimethoate, Appendix 5 – Cold Treatment, Appendix 12 – Irradiation

The exporter must nominate, in their "Application for Registration", the person/s who will be responsible for carrying out and recording the following:

- Security of treated produce whilst on the premises.
- Supervision of loading/unloading all consignments into and out of the premises
- Identifying and segregating those consignments intended to be treated for New Zealand.
- Documenting all incoming and outgoing produce intended to be exported to New Zealand under this pathway.

The nominated person can be either the exporter delegate or the operator of the treatment establishment.

The exporter/exporter delegate will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

The exporter/exporter delegate will ensure the transport medium is clean and other products (i.e. untreated/non-secure commodities), that could cause cross infestation are not loaded without taking appropriate security precautions.

Where treatments have been performed in other than the exporters own premises and the product is not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28).

4.4.6.3 Appendix 6 – Non-Host

Exporters must ensure adequate security from point of loading through to final loading has been delegated or undertaken directly. Records must be kept throughout any transport movement of non-host products.

4.4.6.4 Appendix 11 – Winter Window

If product is loaded into containers at the packing premises, the packinghouse will ensure minimum time delays in moving commodities from the secure area into container/s. Product should not be left in an unsecure environment for more than 15 minutes.

“Winter window” products transported to another destination for export loading must be subject to strict security provisions. The transport must be clean and not carry any unprotected fruit fly host commodity. That is, either the other commodities are secured (shrink-wrap or similar) or the “winter window” produce is secured.

The exporter must delegate nominated persons to ensure security of produce will be maintained and the nominated persons must acknowledge and accept these responsibilities in writing.

Load out facilities must unload the “winter window” produce quickly and secure immediately on arrival.

Load out facilities loading produce into final destination containers will ensure produce is not exposed to the environment for any period exceeding 15 minutes.

AQIS will audit load out facilities at least monthly to ensure compliance is being maintained.

Additional audits may be undertaken at the discretion of the Senior Exports Inspector.

4.5 Crop Monitoring Responsibilities

Crop monitors must be registered with AQIS for mandatory in-field management controls.

Crop Monitors must register with AQIS or applicable State Departments of Agriculture (or equivalent) to undertake crop monitoring duties for the NZ BQA. A Crop Monitor will include in their application, details of relevant registered growers and the commodities covered.

4.5.1 Crop Monitoring Audit Requirements

Crop monitors will provide registered grower property records upon AQIS/MAF request for auditing. AQIS/State Departments of Agriculture (or equivalent), will perform random audits of each registered crop monitor at least once per year/season for each commodity field monitoring services provided. Audits will include randomly selected growers.

If three growers (minimum) are covered by the same crop monitor, and audits reveal substantial compliance, additional grower audits of the crop monitor may be waived by the Senior Inspector (Exports).

Where a crop monitor is providing services to grower/packer organisations, AQIS will conduct audits of grower requirements in conjunction with packinghouse requirements. Where compliance is found, no additional audits of the growers will be scheduled against the crop monitoring functions.

4.5.2 Crop Monitoring Audits Non Compliance

AQIS will deregister commercial crop monitors for any of the following reasons:

- Failure to maintain individual grower records,
- Inadequate or incorrect records,
- Failure to provide growers with a record of each visit including any recommended pest control measures
- Recommending application of illegal or unregistered chemicals.

4.6 Exporter Responsibilities

4.6.1 Summary of Exporter Registration Requirements

Exporters of all commodities under all the treatments pathways for NZ BQA must be registered with AQIS.

All consignments must be directly traceable to the sourced district. AQIS require grower numbers form part of the trade description requirements.

4.6.2 Summary of Exporter Audit Requirements

Exporters
AQIS will perform an annual audit of all exporters registered for the NZ BQA.

Exporter Delegate
A minimum of two audits per year will be conducted by AQIS on persons with exporter delegate responsibilities.

4.6.3 Exporter Responsibilities

All exporters of NZ BQA products must be registered with AQIS. Exporter applications will be made to the appropriate regional AQIS Office.

Applications for registration will include details of the commodities and treatment pathways (where it is known) the exporter intends to use to meet with conditions stipulated in the SOM.

AQIS will accept the application if details of treatment centres are not known at the time, but exports of the particular commodities will not be permitted until relevant information is provided to AQIS.

Whilst exporters can delegate some duties, the exporter will remain responsible for all activities pertaining to the inspection, security and loading of product following treatment.

Exporters must ensure at all times either directly or by delegation:

. Product security during loading, transport and export consignment consolidation is not compromised and there can be no substitution or cross infestation of product following treatment.

. Exporter inspection requirements as detailed in the SOM are performed by qualified staff and records are kept for all inspections performed.

. Inspection records are given for each grower line presented for AQIS inspection.

. Liaison with AQIS/State Officers takes place as necessary to advise of product movement and inspection requirements,

. Documentation, including phytosanitary certificate endorsements are maintained.

4.6.3.1 Exporter Inspection

Where grower or consignment line inspections are performed by the exporter, full details of the inspection performed will be recorded (Appendix 2.6).

NOTE: Exporter inspections must be undertaken at an appropriate sampling rate, as given in Table 1, Section 2 of the SOM.

Exporters need to ensure all staff undertaking inspection duties are properly trained in pest and weed seed identification of quarantine concern to New Zealand.

During exporter inspections, any soft, bruised or rotted products will be cut to determine evidence of fruit fly infestation. Results of products cut will be noted on the inspection record (Appendix 2.6). A copy of the inspection record is to accompany the consignment. Inspection records must be retained at the packinghouse for audit purposes.

A copy of the inspection record together with other documentation relating to the shipment must be held on file for 2 years and is subject to AQIS/MAF audit.

4.6.3.2 Split Consignment Inspections

Following exporter or exporter delegate grower line inspections, exporters can elect an AQIS ‘consignment’ inspection even if the 'consignment' is to be split to varying destinations and differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any produce not forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: "Split consignment" procedures cannot be implemented until the Senior Inspector (Exports) has approved the necessary documentation and record keeping systems.

Exporters/importers wanting to reduce MAF on arrival inspections of split consignments must adopt a system which fully documents the management procedures. Any procedure must include:

. Notification of consignment details to MAF as they occur.

. New Zealand communication links (importer and MAF contacts).

. Flow chart detailing how the phytosanitary certificate moves through the system.

4.6.3.3 Untreated Produce being forwarded from Country Areas

An EX 186 (Transfer certificate), a signed copy of an EX 28 (Notice of Intention to Export) or, a grower declaration form is to be forwarded with untreated Risk Group 2 fruits from regions outside the place of treatment. The doucument will stipulate the produce has been grown and packed in accordance with conditions and restrictions of the NZ BQA and the contents of the SOM.

4.6.3.4 Delegation of Inspection

Export inspection responsiblities delegated to another party, will be acknowledged and verified in writing. Copies of documentation will be held on appropriate company filing systems (Appendix 2.6).

Where the exporter has delegated inspection requirements to a packinghouse, the delegated person will perform an inspection as per Table 7. This inspection is to be performed before the commodity is packed. Results of the inspection are to be recorded (Appendix 2.6). The exporter can elect AQIS inspection on a grower or consignment line basis. If the packinghouse is not delegated the responsibility of inspection, the packinghouse must perform a recorded in-line inspection for each grower and commodity, **AND** the exporter is to perform an additional inspection prior to AQIS inspection.

NOTE: Accredited AQIS approved arrangement establishments are not required to undertake end-point inspections if procedures enable a 600 unit in-line inspection and the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

Any person/s delegated exporter inspection responsibilities must be able to identify those pests and weed seeds of quarantine concern to New Zealand.

All inspections, whether by exporter staff or delegated persons, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10.

Inspection procedures must include cutting of damaged fruits (Section 4.6.3.1). Records of all products cut will be recorded on the inspection records (Appendix 2.5) and held on file by that exporter/exporter delegate. A copy of this record must be presented with the consignment for AQIS inspection.

4.6.3.5 Documentation

The identity of the exporter, in addition to the grower and packinghouse numbers, will be included on all packages covered by the NZ BQA.

A declaration to this effect will be made on the "Notice of Intention to Export Prescribed Goods"/"Export Permit" (EX 28), EX186 (if appropriate), or in the Exporter Declaration/Comments box in an RFP as follows:

> “The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by NZ MAF and specified tolerances have not been exceeded”

It is important that all phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX 28, and the phytosanitary certificate is given the EX 28 number, a different suffix must be added to the number for each subsequent consignment.

Where an export consignment is drawn from several EX 28s, the phytosanitary number used should be that of the EX 28 from which the greatest volume of product was sourced. A suffix will be added

to the number if consignments have been exported from this line previously. Only this number will be printed in the phytosanitary certificate number box.

If additional EX 28 numbers are required for traceability, these must be placed below the phytosanitary certificate number box in a manner that will ensure these numbers cannot be mistaken for the phytosanitary number.

Traceability for consignments drawn from several RFP's is obtained through the EXDOC system.

4.6.3.6 Procedures for Exporter Rejected Produce

If any stages of live fruit fly are found during an exporter/exporter delegate inspection, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other NZ BQA produce, and identified as not suitable for export to New Zealand.

The exporter or exporter delegate must immediately notify AQIS of the detection.

The AQIS Senior Inspector (Exports) will formally advise and suspend the relevant treatment centre pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

Should during the exporter/exporter delegate inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS. The product must be immediately identified as failed for export to New Zealand and segregated from all other NZ BQA products.

The AQIS Senior Inspector (Exports) will formally advise and suspend the relevant grower pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

4.6.3.7 Post treatment Security

An exporter will nominate, in their Application for Registration (Appendix 2.5), the person/s who will be responsible for carrying out and recording the following:

. Security of cleared/treated produce whilst on the premises.
. Supervision of loading and unloading of all consignments into and out of the premises signifying those consignments intended to be inspected/treated for New Zealand.
. Documenting all incoming and outgoing produce intended to be exported under the NZ BQA.

The exporter/exporter delegate will arrange appropriate transportation to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of delegation and acceptance duties on file.

Full details of the cleared and treated product will be included on Transfer Certificate (EX 186) and Export Permit (EX 28) and is to be faxed through to the local AQIS office.

4.6.3.8 Security of Produce - Exporter/Freight Forwarder Premises

Treated produce will be inspected by AQIS officers on arrival at registered premises. Inspectors will ensure the produce is in a secure/safe condition (no tearing of shrinkwrap or mesh bags).

Documentation must correspond with the contents of the load, and if required, a treatment certificate must be present.

Export shipping or airfreight containers will be inspected by a freight forwarding agent or exporter for cleanliness and condition (any holes in containers will be taped over). Shipping container details will be recorded on the "Container Report Sheet" (Appendix 2.12) and signed by the Exporter/Airfreight Forwarding Agent.

Container inspections can be delegated to a container park. Persons carrying out inspections must be audited to ensure they are aware of their responsibilities. If inspections are carried out at a container park, copies of completed inspection records must be faxed (or sent with container documents) to point of loading and retained on file by both the container park and exporter/freight forwarder etc. NOTE: it is only necessary to complete the "Container report sheet" for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

4.6.3.9 Exporter Audit Responsibilities

All relevant documentation for NZ BQA consignments must be made available to AQIS upon request. Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter/exporter delegate inspections and export documentation (i.e. RFP's, EX 186 EX28's and Phytosanitary Certificates).

4.6.3.10 Exporter Delegate Audit Responsibilities

Packinghouse staff approved to act as an exporter delegate for the purpose of inspection, treatment and/or load out security will undergo two audits per year. Audits will include documentation, knowledge of Risk Group pests, demonstration of inspection techniques, sample selection and knowledge of relevant parts of the SOM.

4.6.3.11 Exporter/Exporter Delegate Non-Compliance

An exporter/exporter delegate may be suspended from the NZ BQA if they are not meeting their obligations. Non-compliance includes:

. Failing to provide up to date and correct documentation
. Failing to correctly draw and sample product
. Failing to appropriately train (or be trained), Quality Control inspectors for the purposes of inspecting NZ BQA product
. Failing to segregate NZ BQA product
. Failing to fulfil any other requirement/responsibility as outlined in the SOM.

Additional audits will be scheduled by AQIS if non-conformities occur within the exporter/exporter delegate responsibilities.

4.7 Management Responsibilities

This section lists and describes the responsibilities associated with any NZ BQA/IHS export pathway to be performed by all those organisations, groups and individuals to ensure that the NZ BQA/IHS is developed, maintained and audited to standards that ensure confidence in the systems being implemented and accuracy in the phytosanitary certification which must be provided for export of fruit fly host products to New Zealand.

All systems will be subject to random audits by the Canberra Office and New Zealand MAF may audit all systems at frequent intervals. The purpose of such audits will be to establish that the terms and conditions of the NZ BQA/IHS are being met via the procedures agreed to and documented in this Manual, and will include measurement of pathway compliance from growers (where required) through to final export container loading and all associated documentation.

4.7.1 AQIS Canberra Office

The AQIS organisation structure and management flow chart is at Attachment 2 at the end of this Section. It is recommended that each AQIS Regional Office and/or State Department develop its own organisation structure and management flow chart as it will apply to the management and auditing of the Australian - New Zealand NZ BQA/IHS, and include this information for distribution within that State.

Manager - Plant Programs Section - Plant Programs Branch

Will be responsible for ensuring;

- All components of the NZ BQA/IHS Systems Operations Manual are being complied with consistently, over all commodities and treatments through all States.
- By delegation within Plant Programs Section, for all establishments/premises that are required to be registered, that regular audits of State Departments (where applicable) and AQIS Region/State Office systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the NZ BQA/IHS and that a proper record management system is available and easily accessible.
- That AQIS Region/State Offices are conducting audits of Certification Assurance (approved arrangement) establishments in accordance with the requirements of QMP - SM - 01 and the requirements of the NZ BQA/IHS and this Manual.
- Wherever deficiencies are found in the systems (either at or within the States' responsibilities) that any adverse findings are recorded and corrected at the earliest opportunity and are subsequently re-audited to verify that corrective action requests have been satisfactorily implemented.
- Collate and circulate up to date National lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.
- That all amendments to this Manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.
- That audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

4.7.2 State Departments of Agriculture

Where AQIS is not directly represented at State level (Tasmania) State Departments of Agriculture or their equivalents are responsible for the following:

- The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM.
- Ensure all exporters, treatment centres, packinghouses and growers (where applicable) are meeting the requirements of the NZ BQA and the directions contained in the SOM.
- Ensure inspection staff are trained in the terms, responsibilities and conditions for all NZ BQA commodities from that State.
- Ensure all required components of the export pathways are registered for that State. The state must have an up-to-date list of registered growers, packers, treatment centres and exporters for the NZ BQA commodities. A copy of this list is to be made available to AQIS Central Office.
- Ensure audits (including internal audits) are being conducted at the correct frequency, implement corrective action where required, has been effected and that all audit observations are recorded,
- Ensure the Canberra Office (Program Manager) is informed where any breaches of the conditions of the SOM are observed.
- Where required, ensure the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual State management plans (as submitted to MAF New Zealand), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of New Zealand NASS Standards 158.03.06 and 158.03.07 and
- Report any detections of economically significant fruit fly species found within trapping grids to AQIS Central Office within 24 hours of identification.

4.7.3 AQIS State Offices

AQIS State Offices, through the Regional Managers and Program Managers (Exports), located in Queensland, New South Wales, Victoria, Northern Territory, Western Australia and South Australia are responsible for the following;

- The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM.
- Ensure all exporters, treatment centres, packinghouses and growers (where applicable), are meeting the requirements of the NZ BQA and the directions contained in the SOM.
- Ensure inspection staff are trained in the terms, responsibilities and conditions for all NZ BQA commodities being exported from that State.
- Ensure all required components of the export pathways for commodities are registered for that State.
- Ensure audits (including internal audits), are being conducted at the correct frequency and the measurement of the system and corrective action where required, has been effected and recorded.
- Ensuring Central Office (Program Manager) is informed where any breaches of the conditions of this Manual are observed.

- Ensuring all inspectors in their State, involved in the NZ BQA export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported in any district of Australia.
- Ensuring Central Office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

4.7.4 Registration Requirements

AQIS Offices and State Department agencies will implement a registration system for all growers (where applicable), packinghouses (where applicable), treatment centres and exporters who intend to produce, pack, treat and export fruits and vegetables as listed in this Manual for export to New Zealand.

AQIS prefers that growers should register for the New Zealand programs with their packinghouse or exporter however AQIS will accept grower applications for registration at local offices, State Departments of Agriculture or their equivalent. Whichever authority accepts the registration of growers/properties, they will be responsible to ensure that registration details are forwarded to both the AQIS State Office and the AQIS Canberra Office. The accepting authority will also be responsible for ensuring grower spray and monitoring diaries are current and relevant.

Growers of commodities who require registration will not be permitted to participate in the New Zealand trade for that commodity, unless AQIS has details of the properties or blocks for registration, of that grower.

All organisations that are undertaking approved disinfestation treatments must be registered, packinghouses where required for specific commodities must be registered and all exporters of fruit fly host commodities (including non-host commodities) must be registered for each commodity.

It is the responsibility of each individual State/region to develop a system of recording Registrations, and that such records are maintained so they are auditable.

Registration details will include name, address, unique number identifier, purpose of registration (grower, packer, treatment centre etc.), and current status e.g. active/non active.

AQIS State Offices and State Department Agencies must forward a list of registrations made in that State to Canberra Office for an Australian consolidated list A list of current registrations should be forwarded prior to the commencement of each commodity season and must be updated/amended as new applications are processed during a season. Canberra Office will make this list available to all State Offices/Agencies through the LAN computer network or hard copy documents.

NOTE: this information is extremely important, particularly when exporters are sourcing fruits from interstate but assembling export consignments in their home State prior to export to New Zealand.

4.7.5 Sampling Requirements

For the purpose of the treatments detailed in Appendix 3.3, 3.4 and 3.5 of this manual the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

4.7.6 AQIS Inspection Procedures

Exporters will provide AQIS with inspection records of the grower or consignment line inspection prior to inspection. If all records are not provided or any records are incomplete, the consignment will not be inspected. AQIS will **not** accept outdated inspection forms.

Inspections performed by AQIS for the NZ BQA programs will be recorded on "Inspection Record - New Zealand" (Appendix 2.6)

NOTE: Alternative types of Inspection records can be used as long as they contain the information supplied on the inspection record (Appendix 2.6)

AQIS inspectors must conduct inspections at the same sampling rate and consignment basis (grower or consignment line) undertaken by the exporter/exporter's delegate. Inspections will be in accordance with the sampling plan detailed in Table 1.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

Packaging must be checked during the inspection for compliance with the *Export Control (Plants and Plant Products) Orders, 2005* and requirements of the SOM.

NOTE: Should an AQIS consignment inspection result in a rejection for quarantine purposes, the whole consignment is rejected, not just that particular grower line. If the exporter requires the balance of the consignment for export purposes, the exporter/exporter delegate must re-inspect the balance of the consignment (as it is a new consignment line), by grower line before AQIS will re-inspect.

NOTE: AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest. This must be undertaken until industry can provide clear scientific evidence that the mealybugs *Ferrisia virgata, Maconellicoccus hirsutus, Nipaecoccus viridis* and *Planococcus pacificus* are not associated with this export pathway.

4.7.7 Consignment Line Samples

Following individual grower line inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines consist of commodities from a common treatment pathway (can be different growers). For example, under Appendix 4 to the NZ BQA zucchinis and rockmelons can be combined as a consignment—scallopinis cannot be combined with these commodities as they are associated with a different pathway (ie, in-field controls as well as dimethoate).

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. There can be no rules of how this requirement is applied. However, the following guidelines may assist in determining selection of sample cartons;

- One or more samples from the grower submitting the largest grower line within the consignment.

- One or more samples from the commodity comprising the greatest quantity in the consignment line.
- At least one carton from the commodity seen to present the greatest quarantine risk.
- At least one carton from any known "poorer" performing growers/packers or from a newly registered grower or packer.

Consignment lines passed after AQIS inspection will be identified as "Passed for New Zealand" and immediately separated from any other produce not passed or destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.7.8 Grower Line Samples

A grower line is an inspection performed by an exporter/exporter's delegate consisting of one grower and one treatment pathway. This includes a grower line presented for inspection that will subsequently be split into separate consignments for export.

Grower lines passed after AQIS inspection will be identified as "Passed for New Zealand" and immediately separated from any other produce which has not passed or destined for New Zealand. The placement of cards or stickers onto pallets by the exporter/exporter delegate is recommended.

4.7.9 Rejection Procedures

A rejection upon inspection by AQIS of either a consignment or grower line does not necessarily indicate a packinghouse or grower has breached the conditions of the NZ BQA. It should however indicate a possible problem within the packer/exporter system and will be recorded.

All rejections are to be recorded on Form Ex 161 (Inspection Advice Note) and must detail the grower, packer and exporter/delegate through which the commodity has passed.

Exporters/exporter delegates who fail two inspections in any one season must be audited immediately. This will ascertain any reasons AQIS may consider necessary for suspension from the NZ BQA, or if corrective actions can be implemented.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for Quarantine Risk Group 3 Pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of "Area Freedom," all districts in that State are suspended. Audit/s must be undertaken at the earliest opportunity.
- Any rejection for Quarantine Risk Group 2 Pests – AQIS Senior Inspector (Exports) to be informed immediately to consider if audit of grower, packer, exporter or exporter delegate is necessary. This may depend on type and quantity of infestation detected.
- Any rejection for Quarantine Risk Group 1 Pests - The consignment can be totally withdrawn or corrective action taken. Corrective action can include treating the product (fumigation etc.) or by the exporter withdrawing the offending part of the consignment. Re-inspection must be conducted by exporter/exporter's delegate prior to representment for AQIS inspection.

4.7.10 AQIS Auditing Requirements

Auditing is necessary to ensure all parties are meeting their obligations as set out in the SOM. It is essential during an AQIS audit of growers, packinghouses, treatment centres, exporters and exporter's delegates, to ensure the auditee is using the current version of the SOM.

AQIS inspection staff will conduct audits of applicable growers, packinghouses, treatment centres, exporters and exporter's delegates to ensure compliance with registration requirements. Audits are conducted as per requirements in each individual section of the SOM (Attachment 1 to Section 4).

AQIS **may not** audit all **individual growers** who are supplying fruit to:

- Approved arrangement packinghouses,
- Packinghouses not requiring grower registration.
- Growers using the services of a registered crop monitor.

Note: Some growers under these regimes will be audited as part of packinghouse establishments audits as documented in Grower Requirements Section of the SOM.

4.7.11 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

- Exporter/delegate inspection records.
- Grower pest monitoring records and pest control diaries (commodity specific).
- Packer training and associated pest identification.
- General hygiene of premises.
- Segregation and identification of produce.
- Staff responsibilities,
- Exporter or exporter's delegate inspection procedures and pest/weed identification skills.

Should auditing fail to identify any breach of the NZ BQA and responsibility of the SOM, all parties will be immediately reinstated.

Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the applicable Senior Inspector (Exports) who will co-ordinate necessary action and advise all parties at the earliest opportunity.

Copies of any audit will be given to the relevant components of the pathway audited and kept on file.

Inspectors undertaking these audits must be AQIS AQA, AQIS approved arrangement or ISO/approved arrangement trained and accredited.

4.7.12 Fruit Fly Area Freedom – State Departments of Agriculture Responsibilities

Area Freedom - Fruit Flies

For the purpose of the NZ BQA, "Area Freedom" is recognised as a treatment. Areas currently considered to be free of fruit flies are;

. Tasmania
. Riverland area of South Australia surrounding the towns/cities of Murtho Renmark, Loxton, Berri, Barmera, Waikerie, Cadell and the township of Mypolonga.
. Sunraysia District of Victoria surrounding the towns/cities of Mildura, Merbein, Nangiloc/Colignan, Robinvale, Nyah and Nyah West, Swan Hill and Barham
. Sunraysia districts of New South Wales surrounding the towns of Dareton, Curlwaa and Coomealla,
. Murrumbidgee Irrigation Area of New South Wales including the towns/cities of Griffith, Leeton and Hillston.
. The Ord River Irrigation Area – Western Australia
. The Shepparton Irrigation Area - Victoria

Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Surveys conducted by ….

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. The procedures and controls are documented such that they can be readily demonstrated to, and audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of Fruit Flies and managed under the Tri-state agreement between the States of New South Wales, Victoria and South Australia and:

- Reflect the requirements of New Zealand NASS Standard 158.03.06., the Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

- Management and control procedures for each area which have been accepted by MAF as meeting all the requirements (or equivalence) with the New Zealand NASS Standard 158.03.06.

Outbreak

Area freedom will be assumed, unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. One or more larvae or pupae are found in locally grown fruit, or
. Two male fruit flies are trapped within 400 metres of each other, within a 14-day period, or
. A single female fly is trapped.

In this case, "Area Freedom" will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of NASS Standard 158.03.06, the suspension period will be reduced to;

  - one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site or 30kms should there be two outbreak sites within 3 kms.

State Departments must advise AQIS Canberra Office of any amendments to their management procedures at the earliest opportunity. Central Office will forward amendments to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (minimum annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable New Zealand NASS Standard 158.03.06.

Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

APPENDIX 1 NEW ZEALAND PEST LIST – NZ BQA COMMODITIES

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under Appendices 2 (Area Freedom) and 5 (cold storage disinfestation) to the NZ BQA.

Growers and packinghouses must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

- avocado sun blotch viroid

1.1 Avocado, *Persea Americana*

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600-unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale

Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida
Acarina
Tarsonemidae
Polyphagotarsonemus latus broad mite
Tetranychidae
Eotetranychus sexmaculatus sixspotted mite
Tetranychus urticae twospotted spider mite

Fungus

Ascomycota
Dothideales
Botryosphaeriaceae
Botryosphaeria dothidea
(anamorph *Fusicoccum aesculi*)
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana ear rot
(anamorph *Botrytis cinerea*)

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Lasiodiplodia theobromae stem-end rot
Unknown Coelomycetes
Unknown Coelomycetes
Colletotrichum acutatum -

Non-regulated non plant pests/organisms

None

CAPSICUM
Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendices 4 (dimethoate treatment) and 10 (field control programmes) to the NZ BQA/IHS.**

A number of Risk Group 2 pests are listed for capsicums, and AQIS can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. bryoniae* should it occur.
4. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. If by chance *B. tabaci* were present on harvested capsicum fruit as a hitch-hiker, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
5. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
6. Historical records show that *B. tabaci* has never been detected on capsicum fruit during AQIS pre-export inspection.

Conogethes punctiferalis

1. In field controls for *Lepidopteran* species are a requirement of grower registration, as such YPM (Yellow Peach Moth) will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Lepidopteran spp* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

Thrips palmi

1. If *T. palmi* were present on harvested capsicum fruit, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on capsicum fruit during AQIS pre-export inspection.

Monilinia fructigena

1. This fungi does not occur in Australia.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
*Bactrocera kraussi**	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

1.3 Capsicum, *Capsicum annuum.*

Insect

Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci [vect]	
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Fungus

Ascomycota	
Leotiales	
Sclerotiniaceae	
Monilinia fructigena	European brown rot
(anamorph *Monilia fructigena*)	

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample.
Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug

1.3 Capsicum, *Capsicum annuum.*

Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aleyrodidae	
Aleurodicus dispersus	spiralling whitefly
Trialeurodes vaporariorum [strain]	greenhouse whitefly
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Coccidae	
Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale
Diaspididae	
Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Nectria haematococca var. *brevicona*	dry rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	

1.3 Capsicum, *Capsicum annuum.*

Alternaria alternata f. sp. *lycopersici*	-
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot
Tuberculariales	
Tubercullariaceae	
Fusarium oxysporum f. sp. *vasinfectum*	fusarium wilt
Pythiales	
Pythiaceae	
Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak
Virus	
-	
-	
-	
tobacco leaf curl bigeminivirus [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-
Weed	
Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf
Xanthium spp. (except *X. spinosum*)	bur
Caryophyllales	
Amaranthaceae	
Amaranthus spp.	amaranthus
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Listroderes costirostris	vegetable weevil
Listroderes obliquus	vegetable weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Myzus persicae	green peach aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Pyralidae	
Sceliodes cordalis	poroporo fruit borer
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida

1.3 Capsicum, *Capsicum annuum.*

Acarina	
Eriophyidae	
Aculops lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli*)	phomopsis stem rot
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	

1.3 Capsicum, *Capsicum annuum.*

Atheliaceae	
Athelia rolfsii	Rolf's disease
(anamorph *Sclerotium rolfsii*)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phoma destructiva	bulb rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Bacterium	
-	
-	
Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt

1.3 Capsicum, *Capsicum annuum.*

Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	
A*grobacterium tumefaciens*	crown gall
Weed	
Angiospermae	
Asterales	
Asteraceae	
Galinsoga parviflora	
Sonchus spp.	sowthistle
Poales	
Poaceae	
Echinochloa spp.	grasses
Eleusine indica	goose grass
Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug

Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth

Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite

Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	

Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non-plant pests/organisms

None

CUCUMBER
Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme),**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for cucumbers. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested cucumber fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested cucumber fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspections of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the NZ BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.

2. Cucumbers exported to New Zealand under appendix 4 and 10 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	

1.5 Cucumber, *Cucumis sativus.*

Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	

1.5 Cucumber, *Cucumis sativus.*

Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cladosporium cucumerinum	--
Moniliaceae	
Verticillium albo-atrum [severe strain]	progressive wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Virus

-
  -
    -

tobacco ringspot nepovirus [strain] [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid

1.5 Cucumber, *Cucumis sativus.*

Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Mite	
Arachnida	
Acarina	
Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite
Fungus	
Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum	powdery mildew

(anamorph *Oidium asteris-punicei*)	
Hypocreales	
Hypocreaceae	
Gibberella acuminata	fusarium storage rot
(anamorph *Fusarium acuminatum*)	
Gibberella fujikuroi	fusarium rot
(anamorph *Fusarium fujikuroi*)	
Gibberella gordonia	mould
(anamorph *Fusarium heterosporum*)	
Gibberella intricans	root and stem dry rot
(anamorph *Fusarium equiseti*)	
Gibberella zeae	mould
(anamorph *Fusarium graminearum*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	grey mould
(anamorph *Botrytis cinerea*)	
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria	--
(anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	sour rot
(anamorph *Geotrichum candidum*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	rhizoctonia rot
(anamorph *Rhizoctonia solani*)	
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	

1.5 Cucumber, *Cucumis sativus.*

Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of Sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Growers and packinghouses must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk Group 2 pests *Conogethes punctiferalis*. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest *Maconellicoccus hirsutus*.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name

1.6 Grape, *Vitis vinifera.*

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug

Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail
Fungus	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	-
Coniella diplodiella	white rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	

Alternaria vitis	leaf disease
Cladosporium viticola	cladosporium leaf spot

Weed
Angiospermae
Asterales
Asteraceae

Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except *X. spinosum*) [contaminant]	bur

Geraniales
Zygophyllaceae

Tribulus terrestris [contaminant]	caltrop

Poales
Poaceae

Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass

Solanales
Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae

Latrodectus hasselti	Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	

Thripidae	
Frankliniella occidentalis	western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips
Mite	
Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Tetranychidae	
Panonychus ulmi	European red mite
Tetranychus urticae	twospotted spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Fungus	
Ascomycota	
Diatrypales	
Diatrypaceae	
Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker
Elsinoaceae	
Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose
Mycosphaerellaceae	
Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot

Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	-
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	-
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	-
Digitaria violascens [contaminant]	-
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass
Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	-

Pennisetum macrourum [contaminant]	African feather grass
Solanales	
Solanaceae	
Lycium barbarum [contaminant]	boxthorn
Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

MANGO
Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Bactrocera cucumis	cucumber Fruit Fly
Bactrocera frauenfeldi	fruit Fly
Bactrocera jarvisi	jarvis' fruit fly
Bactrocera musae	banana fruit Fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera opiliae	false Oriental Fruit Fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly
Dirioxa pornia	Island Fruit Fly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	yellow peach moth
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Frankliniella schultzei	flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Helopeltis clavifer	
Icerya aegyptiaca	Egyptian fluted scale
Idioscopus clypealis	mango hopper
Idioscopus nitidulus	mango hopper
Ischnaspis longirostris	black thread scale
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth

Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Nipaecoccus vastator	karoo thorn mealybug
Ophiusa tirhaca	
Penicillaria jocosatrix	mango tipborer
Phenacaspis dilatata	mango scale
Planococcus citri	Citrus mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rastrococcus sp.	
Rhyparida limbatipennis	
Saissetia miranda	Mexican black scale
Selenothrips rubrocinctus	redbanded thrips
Sternochetus mangiferae	mango seed weevil
Asterina punctiformis	
Chaetothyrina tenuissima	stem sooty blotch
Cytosphaera mangiferae	stem-end rot
Elsinoe mangiferae (anamorph Sphaceloma mangiferae)	mango scab
Fusicoccum mangiferae	
Nattrassia mangiferae	stem-end rot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangifolia	storage rot
Pestalotiopsis theae	mango blight
Pestalotiopsis virgatula	mango leaf spot
Phomopsis mangiferae	stem end rot
Pythium mangifera	mango powdery mildew
(anamorph Oidium mangiferae)	
Schizoparme straminea (anamorph Coniella	schizoparme fruit rot

Non-regulated pests

Pest Scientific Name	**Common Name**
Aonidiella aurantii	California red scale
Ceroplastes destructor	white wax scale
Epiphyas postvittana	light brown apple moth
Helicoverpa armigera	tomato fruitworm
Heliothrips haemorrhoidalis	greenhouse thrips
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Icerya purchasi	cottony cushion scale
Parasaissetia nigra	nigra scale
Pseudococcus longispinus	long tailed mealybug
Saissetia coffeae	helmet scale
Toxoptera aurantii	black citrus aphid
Toxoptera citricida	brown citrus aphid

1.7 Mango, *Mangifera indica.*

Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria dothidea (*anamorph Fusicoccum aesculi*)	canker
Botryosphaeria parva (*anamorph Fusicoccum parvum*)	canker
Botryosphaeria rhodina	gummosis
Botryosphaeria ribis (*anamorph Lasiodiplodia theobromae*)	canker
Botryotinia fuckeliana (*anamorph Botrytis cinerea*)	grey mould
Cladosporium cladosporioides	cladosporium leaf spot
Cochliobolus hawaiiensis	leaf spot, seed rot
Colletotrichum acutatum	anthracnose
Colletotrichum coccodes	anthracnose
Dipodascus Geotrichum (*anamorph Geotrichum candidum*)	sour rot
Dothiorella aromatica	stem-end rot
Epicoccum purpurascens	black mould
Erysiphe cichoracearum (*anamorph Oidium asterispunicei*)	powdery mildew
Fusicoccum luteum	bunch rot
Glomerella cingulata (*anamorph Colletotrichum gloeosporioides*)	anthracnose
Glomerella lagenaria (*anamorph Colletotrichum orbiculare*)	
Pestalotiopsis funereal	leaf spot
Pestalotiopsis versicolor	pestalotiopsis rot
Phytophthora nicotianae	buckeye rot
Pithomyces chartarum	facial eczema fungus
Pleospora allii (*anamorph Stemphylium vesicarium*)	black mould
Rhizopus stolonifer	rhizopus soft rot
Thanatephorus cucumeris (*anamorph Rhizoctonia solani*)	rhizoctonia rot

MELON
Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Pest Scientific Name	**Common Name**
Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments	
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly
Quarantine: Risk group 2 pests (actionable) - Management Control Systems	
Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

1.8 Melon, *Cucumis melo.*

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample.
Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug

Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	-
Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--

Oomycota
Pythiales
Pythiaceae
Pythium aphanidermatum — cottony leak

Zygomycota: Zygomycetes
Mucorales
Choanephoraceae
Choanephora cucurbitarum — blight

Bacterium

-
-
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* — bacterial rot

Virus

-
-
-
tobacco ringspot nepovirus [strain] [VO] — -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	

Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata (anamorph *Fusarium lateritium*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	

Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Pseudomonadaceae	
Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

PAPAYA
Carica papaya

Papaya can be exported to New Zealand under Appendix No. 12 - Irradiation of the NZ BQA.

Growers and packinghouses choosing 250 Gray (Gy) irradiation for papaya do not need to be specifically registered for the New Zealand export program.

Growers and packinghouses choosing 150 Gy irradiation and in-field controls for papaya need to be specifically registered for the New Zealand export program for control of regulated pest *Conogethes punctiferalis* (yellow peach moth).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

***Conogethes punctiferalis* is listed for papaya, and AQIS can certify freedom from this pest based on the following:**

Conogethes punctiferalis

1. In field controls for *Lepidopteran spp.* are a requirement of grower registration, as such yellow peach moth will be controlled at the grower level.

2. If grower is not carrying out infield control for *Lepidopteran spp.* papaya will be irradiated at 250Gy prior to export.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	**Common Name**
Asperisporium caricae	black spot
Phomopsis caricae-papayae	wet fruit rot
Phytopthora capsici	buckeye rot
Phytopthora palmivora	black rot
Bactrocera cucumis	**cucumber fruit fly**
Bactrocera frauenfeldi	**fruit Fly**
Bactrocera jarvisi	**jarvis' fruit fly**
Bactrocera musae	**banana fruit fly**
Bactrocera neohumeralis	**lesser Queensland fruit fly**
Bactrocera tryoni	**Queensland fruit fly**
Ceratitis capitata	**Mediterranean fruit fly**
Dirioxa pornia	Island Fruit Fly
Aleurodicus dispersus	spiraling whitefly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug

Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Carpophillis maculatus	dried fruit beetle
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	**yellow peach moth**
Eucalymnatus tessellatus	tessellated scale
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Ferrisia virgata	striped mealybug
Pericyma cruegeri	poinciana looper
Pseudaulacaspis cockerelli	Cockerell's scale
Papaya ringspot virus (type P strain)	PRSV-Type P

Non-regulated pests

Pest Scientific Name	**Common Name**
Brevipalpus phoenicis	passion vine mite
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria rhodina (anamorph Lasiodiplodia theobromae)	gummosis
Botryosphaeria ribis	canker
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum dematium	anthracnose
Corynespora cassicola	leaf spot
Erysiphe cruciferarum	powdery mildew
Fusarium pallidoroseum	fruit core rot
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	anthracnose
Leveillula taurica	powdery mildew
Mycosphaerella caricae (anamorph Phoma caricae-papayae)	leaf spot
Phytophthora nicotianae	buckeye rot
Rhizopus stolonifer	rhizopus soft rot
Aphis spiraecola	spirae aphid

PINEAPPLE
Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the NZ BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarnatine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	

Diaspis bromeliae	pineapple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla	
Unknown Symphyla	
Symphylidae	
Hanseniella sp.	symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetes	
Dematiaceae	
Thielaviopsis paradoxa	
Moniliaceae	
Penicillium funiculosum	

Bacterium

-

-
Enterobacteriaceae
Erwinia ananas marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae
Iridomyrmex glaber black house ant
Paratrechina vaga ant
Tapinoma sp. ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name **Common Name**

Insecta
Coleoptera
Cicujidae
Cryptamorpha desjardinsii Desjardin's flat beetle
Nitidulidae
Carpophilus hemipterus dried fruit beetle
Homoptera
Coccidae
Coccus hesperidum brown soft scale
Pseudococcidae
Planococcus citri citrus mealybug
Lepidoptera
Tineidae
Opogona omoscopa detritus moth
Thysanoptera
Thripidae
Thrips tabaci onion thirps

1.10 Pineapple, *Ananas comosus.*

Mite	
Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite
Nematode	
Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	
Virus	
-	
-	
-	
tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	**Common Name**
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the NZ BQA/IHS.

Growers and packinghouses do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	

Listroderes difficilis	vegetable weevil
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name

1.11 Strawberry, *Fragaria spp.*

Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite
Myriapod	
Diplopode	
Julida	
Blaniulidae	
Blaniulua guttulatus	spotted snake millipede
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail

Limacidae

Deroceras panormitanum	brown field slug
Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and 10 (field control programmes)**

Growers and packhouses that are growing/packing tomatoes for export to New Zealand under appendix 4 to the NZ BQA must be registered for this purpose.

A number of Risk Group 2 pests have been listed for tomatoes. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested tomato fruit as a hitch-hiker, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on tomato fruit during AQIS pre-export inspection.

Thrips palmi

1. If *T. palmi* were present on harvested tomato fruit, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on tomato fruit during AQIS pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export application of dimethoate spray to tomatoes (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
4. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. musae* has never been detected on tomato fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm

1.12 Tomato, *Lycopersicon esculentrum*

Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	
Antherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips

Fungus

Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak

Virus

-
-
-

	-
tobacco ringspot nepovirus [strain] [VO]	
tomato spotted wilt tospovirus [strain] [VO]	-

Phytoplasma

-	
-	
-	
tomato big bud phytoplasma	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm

1.12 Tomato, *Lycopersicon esculentrum*

	cluster caterpillar
Spodoptera litura	
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana	black leaf spot
(anamorph *Cladosporium herbarum*)	
Hypocreales	
Hypocreaceae	
Gibberella acuminata	fusarium storage rot
(anamorph *Fusarium acuminatum*)	
Nectria haematococca	fusarium fruit rot
(anamorph *Fusarium solani*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	grey mould
(anamorph *Botrytis cinerea*)	
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	sour rot
(anamorph *Geotrichum candidum*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	rhizoctonia rot
(anamorph *Rhizoctonia solani*)	
Stereales	
Atheliaceae	

1.12 Tomato, *Lycopersicon esculentrum*

Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot

Non-regulated non plant pests

None

WATERMELON
Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for watermelons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the NZ BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.

4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers

1.13 Watermelon, *Citrullus lanatus*

Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

1.13 Watermelon, *Citrullus lanatus*

Mite

Arachnida
Acarina
Acaridae
Tyrophagus dimidiatus — mushroom mite
Tetranychidae
Eutetranychus orientalis — pear leaf blister mite
Tetranychus desertorum — desert spider mite
Tetranychus lombardinii — southern lobed mite
Tetranychus neocaledonicus — Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Ascochyta spp. -
Phomopsis cucurbitae --

Oomycota
Pythiales
Pythiaceae
Pythium spp. — pythium rot

Bacterium
-
-
Enterobacteriaceae
Erwinia tracheiphila — bacterial wilt
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* — bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta
Hymenoptera
Formicidae
Solenopsis geminata — fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

1.13 Watermelon, *Citrullus lanatus*

Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips
Mite	
Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
	oriental mite

Halotydeus destructor	
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota

Dothideales	
Pleosporaceae	
Leptosphaerulina trifolii	seed rot
Unknown Dothideales	
Didymella bryoniae	cucumber stem rot
(anamorph *Phoma cucurbitacearum*)	
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum	powdery mildew
(anamorph *Oidium asteris-punicei*)	
Hypocreales	
Hypocreaceae	
Nectria haematococca	fusarium fruit rot
(anamorph *Fusarium solani*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	grey mould
(anamorph *Botrytis cinerea*)	
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata	bitter rot
(anamorph *Colletotrichum gloeosporioides*)	
Glomerella lagenaria	--
(anamorph *Colletotrichum orbiculare*)	

Basidiomycota: Basidiomycetes

Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	rhizoctonia rot
(anamorph *Rhizoctonia solani*)	
Stereales	
Atheliaceae	
Athelia rolfsii	Rolf's disease
(anamorph *Sclerotium rolfsii*)	

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

1.13 Watermelon, *Citrullus lanatus*

Sphaerioidaceae	
Phoma exigua	phoma rot
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Bacterium	
-	
-	
Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI
Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for zucchinis and scallopinis. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested zucchini fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on zucchini fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to zucchini and scallopini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 11(winter window) to the NZ BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Zucchinis exported to New Zealand under Appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample.
Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Promecotheca bryanti	-
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid

Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Graphognathus peregrinus	weevil
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Aulacaspis tubercularis	common mango scale
Chrysomphalus aonidum	Florida red scale
Pseudaulacaspis pentagona	white peach scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Tiracola plagiata	banana fruit caterpillar
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida
Acarina
Acaridae
Tyrophagus dimidiatus mushroom mite

1.14 Zucchini & Scallopini, *Cucurbita pepo*

Tetranychidae	
Bryobia spp.	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Hyphomycetes)	
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Virus

-	
-	
-	
tobacco ringspot nepovirus [strain] [VO]	-

Phytoplasma

-	
-	
-	
tomato big bud phytoplasma	-

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

1.14 Zucchini & Scallopini, *Cucurbita pepo*

Insecta
Hymenoptera
Formicidae
Solenopsis geminata fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Stratiomyidae	
Inopus rubriceps	Australian soldier fly
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Diaspididae	
Aspidiotus nerii	oleander scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	

Thripidae	
Frankliniella occidentalis	western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Parthenothrips dracaenae	palm thrips

Mite

Arachnida
Acarina

Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales

Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot

Erysiphales

Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew

Hypocreales

Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould

Leotiales

Sclerotiniaceae	
Botryotinia fuckeliana	grey mould

(anamorph *Botrytis cinerea*)	
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Microascales	
Unknown Microascales	
Ceratocystis paradoxa	ceratocystis rot
(anamorph *Chalara paradoxa*)	
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria	--
(anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	sour rot
(anamorph *Geotrichum candidum*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	rhizoctonia rot
(anamorph *Rhizoctonia solani*)	
Stereales	
Atheliaceae	
Athelia rolfsii	Rolf's disease
(anamorph *Sclerotium rolfsii*)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot

1.14 Zucchini & Scallopini, *Cucurbita pepo*

	--
Fusarium solani f. sp. *cucurbitae*	
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Ralstonia solanacearum	bacterial wilt
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

APPENDIX 2 FORMS

2.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION
AUSTRALIA - NEW ZEALAND
BILATERAL QUARANTINE ARRANGEMENT and
NEW ZEALAND IMPORT HEALTH STANDARDS

NAME OF GROWER/S		
GROWER NUMBER (if previously registered)		
POSTAL OR BUSINESS ADDRESS		
	POST CODE	
PROPERTY ADDRESS		
	POST CODE	

REAL PROPERTY DESCRIPTION (of area under planting)

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operation Manual – Amendment 6 – March 2005 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Cucurbits (type)
Citrus	Tomato

Appendix 2.2

2.2 APPLICATION FOR PACKINGHOUSE REGISTRATION

APPLICATION FOR PACKER REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS			
NAME OF PACKER			
AQIS REGISTERED EXPORT ESTABLISHMENT NUMBER (if applicable)			
POSTAL ADDRESS			
		POST CODE	
PREMISES ADDRESS			
		POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a packer of .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operation Manual –Amendment 6 – March 2005and agree to be bound by the conditions and restrictions contained therein as they apply to packers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Cucurbits (type)
Citrus	Tomato

Appendix 2.3

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION

APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS			
NAME OF TREATMENT CENTRE			
AQIS REGISTERED EXPORT ESTABLISHMENT NUMBER (if applicable)			
POSTAL ADDRESS			
		POST CODE	
PREMISES ADDRESS			
		POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a treatment centre as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Quarantine and Inspection Service, Department of Agriculture, Fisheries and Forests Australia.

I have read the arrangement and the Systems Operation Manual –Amendment 6 – March 2005 and agree to be bound by the conditions and restrictions contained therein as they apply to treatment centres.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

Treatment Type (please specify)

Fumigation	Dimethoate
Cold Treatment	Irradiation

Appendix 2.4

2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the NZ BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....
I/We have copies of the NZ BQA Systems Operation Manual – Amendment 6 – March 2005 and have the ability to recognise and identify the pests and weed seeds that are contained in the MPL's for quarantine pests.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to NZ BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any NZ BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the NZ BQA and the Instructions contained in the Operation Manual for Australian New Zealand NZ BQA.

Signature .....
Printed Name ..... Date .....

Approved ..... Senior Inspector/Superving Inspector
Date ..... Seal/Stamp .....

Appendix 2.5

2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Amendment 6 – March 2005 of the Australian - New Zealand Bilateral Quarantine Arrangement and the NZ BQA Systems Operation Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the NZ BQA and the Systems Operation Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for NZ BQA commodities will provide properly identified Inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection
The following persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Treatment Loading Supervision Authority

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the NZ BQA for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of NZ BQA commodities as is required by the NZ BQA and the contents of this Manual.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the NZ BQA and the Systems Operation Manual Amendment 6 – March 2005 required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

Appendix 2.6

2.6 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Tick

Date	Trade Description .....
Commodity	Commodity .....
No of Cartons	Registered Grower No. .....
Registered Grower No.	Registered Packing Establishment .....
	.....
Ex 28/RFP Number/s:	Australian Origin .....
.....……	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250
Exporter/s	(Tick one) .....
	Exporter Inspection completed by:.....
	(a) Exporter
Inspector Name	(b) Exporter delegate (name)
(Block Letters)	**Inspected by**:
.....	Grower Line .....
Inspector's Signature	Consignment Line .....

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NQ**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed ☐ **Failed** ☐ **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Quarantine Pest
****Please note, this is a template only: packinghouses/ exporters are permitted to formulate their own copies of this template, provided all of the above information is contained. This form will be checked and approved at audit**

2.7 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	Number of Cartons/Commodity	Temperatures Taken *

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

Appendix 2.7

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m^3 with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

Appendix 2.8

2.8 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKING HOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0C$.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

Appendix 2.9

2.9 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand should I/we wish to re-enter the Arrangement protocol at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in block letters Signature Date

....

Voluntary Withdrawal

I/we agree my/our property is no longer required to be registered under the terms and conditions required for the New Zealand export trade for NZ BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand should I/we wish to re-enter the Arrangement at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in Block letters Signature Date

....

AQIS OFFICE DOCUMENTATION
Fax to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or
Inspector's Signature

.....

2.10 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection/audit of the following property/premises:- (Grower – Packer – ED – Treatment Centre – Exporter – Freight Forwarder – Other ……) (select appropriate title)

Name .....
Address .....
.....
.....
Reg No .....

I believe for the following reasons that the entity outlined above no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) they (please indicate):

have no intention to correct the above mentioned deficiency in the immediate future

OR

are suspended until corrective action has been implemented and successful re-audit has been undertaken

I hereby declare the entity outlined above is suspended from Apppendix …….. (all, 4, 10 etc) of the Australia - New Zealand NZ BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Representative Name	Representative Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

2.11 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY ALL TOMATO CONSIGNMENTS TO BRISBANE, FROM TOWNSVILLE, BUNDABERG OR CAIRNS

DECLARATION OF TREATMENT

I, ... of .....……

.....……..

hereby declare that the .....……cartons of tomatoes consigned

to..... .....……..on .....(date) were

harvested from the following registered

blocks……..

…… AND

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute.

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

3. further declare .....(insert name of supervisor) a designated person nominated by .....(insert name of exporter) has supervised the loading of this consignment for transport to ….....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....20.....

Signature ..... Witness .....

2.12 CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28/RFP Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

2.13 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

2.14 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

<table>
<tr><td rowspan="4">Grower name and address:</td><td>Cucurbit type (please tick ✓)
Cucumber ☐
Honeydew melon ☐
Rockmelon ☐
Scallopini ☐
Watermelon ☐
Zucchini ☐</td><td>Treatment (please tick ✓)
Appendix 3 & 10 ☐
(methyl bromide)
Appendix 4 & 10 ☐
(dimethoate dip)
Appendix 10 & 11 ☐
(winter window)</td></tr>
<tr><td colspan="2" rowspan="3">Declaration

I,……hereby declare the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.

……. ……/……/……
Signature Date</td></tr>
<tr><td>Grower number:</td></tr>
<tr><td>Consignee name and address:</td></tr>
</table>

Production block number	Package type (carton, bin etc)	Number of packages	Total mass

Australia – New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual 6

Australian Government
Department of Agriculture, Fisheries and Forestry
Australian Quarantine and Inspection Service

This systems operation manual incorporates the New Zealand import health standards for Australian fruit fly host material and the Australian Quarantine and Inspection Service's operational requirements.

This manual is maintained and controlled by the AQIS Plant Programs Section in Canberra

Systems Operation Manual (SOM)

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES 5
AMENDMENT RECORD 8
GLOSSARY OF TERMS 9
DEFINITIONS 10
INTRODUCTION 11
Scope of the Manual 11
SECTION 1 11
1.1 Pest categories 11
1.1.1 Risk Group 3 (RG3) Pests 11
1.1.2 Risk Group 2 (RG2) Pests 12
1.1.3 Risk Group 1 (RG1) Pests 12
1.1.4 Non Regulated Pests 12
1.1.5 Regulated Pests 12
1.2 Maximum pest levels 12
Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS 13
1.3 Contaminates 13
SECTION 2 TREATMENT APPENDICES 14
2.1 Summary 14
Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST
2.2 Appendix 1 – Country freedom from fruit fly 26
2.3 Appendix 2 – Area freedom districts within Australia 26
2.3.1 General requirements 26
2.3.2 Approved area freedom districts 27
2.4 Appendix 3 – Fumigation 28
2.5 Appendix 4 – Dimethoate 28
2.6 Appendix 5 – Cold treatment 29
2.7 Appendix 6 – Non host 29
2.8 Appendix 7 – Heat treatments 29
2.9 Appendix 8 – Not currently in use 29
2.10 Appendix 9 – Not currently in use 29
2.11 Appendix 10 – Field control programs 29
2.12 Appendix 11 – Winter window 30
2.13 Appendix 12 – Irradiation 30
SECTION 3 GROWER RESPONSIBILITIES 31
3.1 Summary 31
3.2 General requirements 32
3.3 Registration 32
3.4 Orchard responsibilities 32
3.4.1 Citrus growers 33
3.4.2 Avocado growers 33
3.5 Audits 33
3.5.1 Non Compliance 34
3.5.2 Packhouse Approved Arrangement systems 34
3.5.3 Security and supervision 35
SECTION 4 CROP MONITOR RESPONSIBILITIES 36
4.1 Registration 36
4.2 Audit 36

4.3 Non Compliance 36
SECTION 5 PACKHOUSE RESPONSIBILITIES 37
5.1 General requirements 37
5.2 Documentation 37
5.3 Delegation of exporter responsibilities 37
5.3.1 General 37
5.3.2 Security and supervision 38
5.3.3 Inspection 38
5.4 Audit 38
5.4.1 Non Compliance 38
5.5 Approved Arrangements – Packhouse 39
5.5.1 General requirements 39
5.5.2 Audit 39
5.5.3 Inspection requirements 40
Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS 40
5.5.4 Documentation 41
5.5.5 Post treatment security 41
SECTION 6 TREATMENT CENTRE RESPONSIBILITIES 43
6.1 General requirements 43
6.2 Registration 43
6.3 Audit 43
6.3.1 Non Compliance 43
6.4 Post treatment security 43
6.4.1 Registration 43
6.4.2 General requirements 44
6.5 Post treatment transportation 44
6.6 Treatment Appendices 45
6.6.1 Appendix 3 – Fumigation 45
Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES 45
6.6.2 Appendix 4 – Dimethoate 46
Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES 46
6.6.3 Appendix 5 – Cold treatment 48
Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS 48
6.6.4 Appendix 12 – Irradiation 49
6.7 Tablegrape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hass*
6.7.1 General requirements 51
6.7.2 Treatment 51
6.7.3 Traceability 51
6.7.4 Additional precautionary measures 51
SECTION 7 EXPORTER RESPONSIBILITIES 52
7.1 General requirements 52
7.2 Exporter Inspection 52
7.2.1 Split Consignment Inspections 53
7.3 Documentation 53
7.4 Rejected Produce 54
7.5 Security of Produce 54
7.6 Audit 54
7.6.1 Non-compliance 55
SECTION 8 GOVERNMENT RESPONSIBILITIES 56
8.1 AQIS Canberra office 56
8.1.1 Manager - Plant Programs 56
8.2 AQIS State Offices 56

8.2.1 Registration requirements 57
8.2.2 Sampling requirements 57
8.2.3 AQIS inspection procedures 57
8.2.4 Consignment line samples 58
8.2.5 Rejection procedures 58
8.3 Audit 59
8.3.1 Audits after Product Rejections by AQIS 59
8.4 Fruit Fly Area Freedom – State Departments 61
8.4.1 Validation of Area Freedom 61
8.4.2 Trapping 62
Attachment to Section 8.1 AQIS Plant Contact List 63
ATTACHMENT 1 - NEW ZEALAND PEST LIST 64
AVOCADO 64
BANANA 69
CAPSICUM 72
CITRUS 81
CUCUMBER 87
GRAPE 95
MANGO 103
MELON 106
PAPAYA 114
PINEAPPLE 116
STRAWBERRY 120
TOMATO 123
WATERMELON 129
ZUCCHINI & SCALLOPINI 136
ATTACHMENT 2 FORMS 140
2.1 APPLICATION FOR GROWER REGISTRATION 140
2.2 APPLICATION FOR PACKHOUSE REGISTRATION 141
2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION 142
2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 143
2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT 144
2.6 INSPECTION RECORD 146
2.7 FUMIGATION RECORD 147
2.8 COLD DISINFESTATION RECORD 149
2.9 WITHDRAWAL NOTICE 150
2.10 SUSPENSION NOTICE 151
2.11 DECLARATION OF DIMETHOATE TREATMENT 152
2.12 CONTAINER REPORT SHEET 153
2.13 AVOCADO GROWER DECLARATION 154
2.14 CUCURBIT GROWER DECLARATION 155

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AMENDMENT RECORD

Amendments to this manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	s. 22(1)(a)(ii)	18 June 1999
2		14 July 1999
3		27 April 2000
4		March 2001
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6		August 2006
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GLOSSARY OF TERMS

ANVAS	Avocado Nursery Voluntary Accreditation Scheme
AA	Approved Arrangement
AQIS	Australian Quarantine and Inspection Service
DAFF	Australian Government Department of Agriculture, Fisheries and Forestry
Dmin	The localized minimum absorbed dose within the process load
Dmax	The localized maximum absorbed dose within the process load
EXDOC	Electronic Export Documentation
EX28	Notice of Intention to Export/Export Permit
EX161	Inspection advice notice
EX186	Transfer Certificate
EX222	Approved Arrangement equivalent of EX28
ED	Exporter Delegate
Gray (Gy)	Unit of absorbed dose where 1 Gy is equivalent to the absorption of 1 joule per kilogram
IHS	Import Health Standards (New Zealand)
MAF	Ministry of Agriculture and Forestry (New Zealand)
MeV	Mega Electron Volt
MAP	Maximum Allowable Prevalence
NZ BQA	Australia-New Zealand Bilateral Quarantine Arrangement
PHYTO	Export conditions database.
RFP	Electronic Request for Permit

DEFINITIONS

AQIS Inspection	An inspection of any number of packages from one exporter from the same treatment pathway presented for inspection at one time.
Consignment line inspection	Inspection consists of commodities from a common treatment pathway. The inspection lot can be made up of different growers provided grower line inspections have been undertaken.
Grower line inspection	Inspection that must be performed prior to AQIS inspection and consists of one grower, on commodity and one treatment pathway.
Phytosanitary certificate	A certificate issued in accordance with Article V of the International Plant Protection Convention or at the request of a foreign country authority.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a hand).

INTRODUCTION

The New Zealand Bilateral Quarantine Arrangement (NZ BQA) is a formal agreement between the Australian Government Department of Agriculture Fisheries & Forestry and the New Zealand Ministry of Agriculture and Forestry (MAF), to ensure New Zealand's pre-export requirements are documented. This manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The NZ BQA details a series of treatment appendices that describe the requirements for a particular treatment for fruit fly host material. The structure incorporates developments in relation to the documentation of New Zealand Import Health Standards (IHS) on a commodity-by-commodity basis.

Scope of the Manual

This Systems Operation Manual (SOM) is designed to ensure;

- Only approved fruit fly host commodities are exported to New Zealand;
- Homogeneity of fruit fly host commodity consignments;
- Approved treatments for fruit fly host produce are used;
- Required levels and intensity of inspection of fruit fly host produce are maintained;
- Post treatment security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce;
- Trace back to grower/packer/treatment centre (as appropriate); and
- Accurate phytosanitary certification in accordance with New Zealand requirements

AQIS State Offices and State Departments of Agriculture (or equivalents) are to conduct management audits of the systems to ensure state responsibilities are being adequately performed and recorded.

This SOM gives instructions for audit procedures and maintenance of records that will be the responsibility of AQIS State Offices, and where applicable State Departments of Agriculture or their equivalents.

SECTION 1

1.1 Pest categories

MAF have commenced the re categorisation of pests as regulated and non-regulated pests. Certain regulated pests are deemed by MAF to be high impact pests which is divided into high impact fruit flies and high impact non fruit fly. High impact fruit fly categorisation is equivalent to the previous RG3 and high impact non fruit fly equivalent to RG2 pest categories.

As MAF review current IHS's the existing risk categories of RG1, RG2 and RG3 will be transcribed into the new categories. At this point in time only the mango, papaya, zucchini and banana pest lists reflect this new terminology.

1.1.1 Risk Group 3 (RG3) Pests

Are pests which upon entry into New Zealand would cause major market access disruption for a wide range of New Zealand commodities and/or have significant effects on environment or agricultural production. This group includes species of economically significant fruit flies.

These pests require treatment to be undertaken in Australia with documented procedures to ensure AQIS phytosanitary certification is accurate and auditable by MAF.

If this level pest is detected in New Zealand then the consignment will be re-exported or destroyed and the treatment pathway suspended until such time as an AQIS audit is conducted, and any associated corrective action is undertaken and results accepted by MAF.

1.1.2 Risk Group 2 (RG2) Pests

Are pests which upon entry into New Zealand could cause major market access disruption and/or have significant effects on environment or the agricultural production of a particular commodity.

These pests require some form of management practices to be undertaken (i.e. infield controls, area freedom, or post harvest treatments). An additional declaration to this effect must be made on the phytosanitary certificate.

If this level pest is detected in New Zealand the consignment will be re-exported, destroyed or where appropriate ordered for appropriate treatment. There will be no suspension of trade but a follow up AQIS audit will be conducted to determine cause of the system failure and associated corrective actions undertaken. AQIS may suspend specific commodity pathway until cause of failure is determined and corrective action undertaken.

1.1.3 Risk Group 1 (RG1) Pests

RG1 pests are those pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

These pests require no specific formal treatment or controls, AQIS will inspect for these pests at export inspection, if detected the consignment must be subjected to appropriate treatment/re-conditioning and represented for exporter/exporter delegate (ED) AQIS inspection.

If this level of pest is detected in New Zealand the consignment would be available to be re-conditioned, subject to appropriate treatment (if available), re-export or destroyed.

1.1.4 Non Regulated Pests

These pests have an unlimited tolerance during inspection and are regarded as non-actionable pests between Australia and New Zealand. It should be noted that excessive levels of non-regulated pests may interfere with AQIS inspection and may result in longer inspection times to ensure accurate identification.

1.1.5 Regulated Pests

Regulated pests are regarded as actionable pests between Australia and New Zealand. Actions would be undertaken if they were intercepted/detected. As well as quarantine pests, these include new organisms as defined by the New Zealand *Hazardous Substances and New Organisms Act 1996*, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants.

1.2 Maximum pest levels

Table 1 details inspection levels and tolerances that will ensure that a 95% confidence level that Maximum Allowable Prevalence (MAP) will not be exceeded.

The sample size must be selected/nominated by the exporter or exporter delegate prior to commencement of inspection and cannot be varied. This sample size must be maintained in all subsequent inspections, including AQIS export inspection.

Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weed seeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 - 2000	520	0	≤ 7	0
2001 - 3000	550	0	≤ 7	0
3001 - 4000	560	0	≤ 7	0
4001 - 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

1.3 Contaminates

Consignments contaminated with soil, or other potential carriers of quarantine pests (eg leaf litter) must not exceed tolerances listed below. The consignment may be reconditioned to remove the infestation. After reconditioning, the consignment must be re-inspected and may be exported if found free from infestation.

Consignment lines contaminated with soil in excess of 25g per 600 units shall be washed free of soil prior to release, re-shipped, or destroyed at the importers options and expense.

Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped, or destroyed at the importers option or expense.

SECTION 2 TREATMENT APPENDICES

2.1 Summary

The NZ BQA is divided into separate treatment pathways, called treatment appendices.

The appendices form the framework for the treatment of commodities for the species of economically significant fruit flies (RG3 pests).

The treatment appendices are treated as separate distinct pathways and as such commodities exported under the same treatment pathways may be inspected together at AQIS inspection. Commodities from separate treatment pathways may not be combined for inspection.

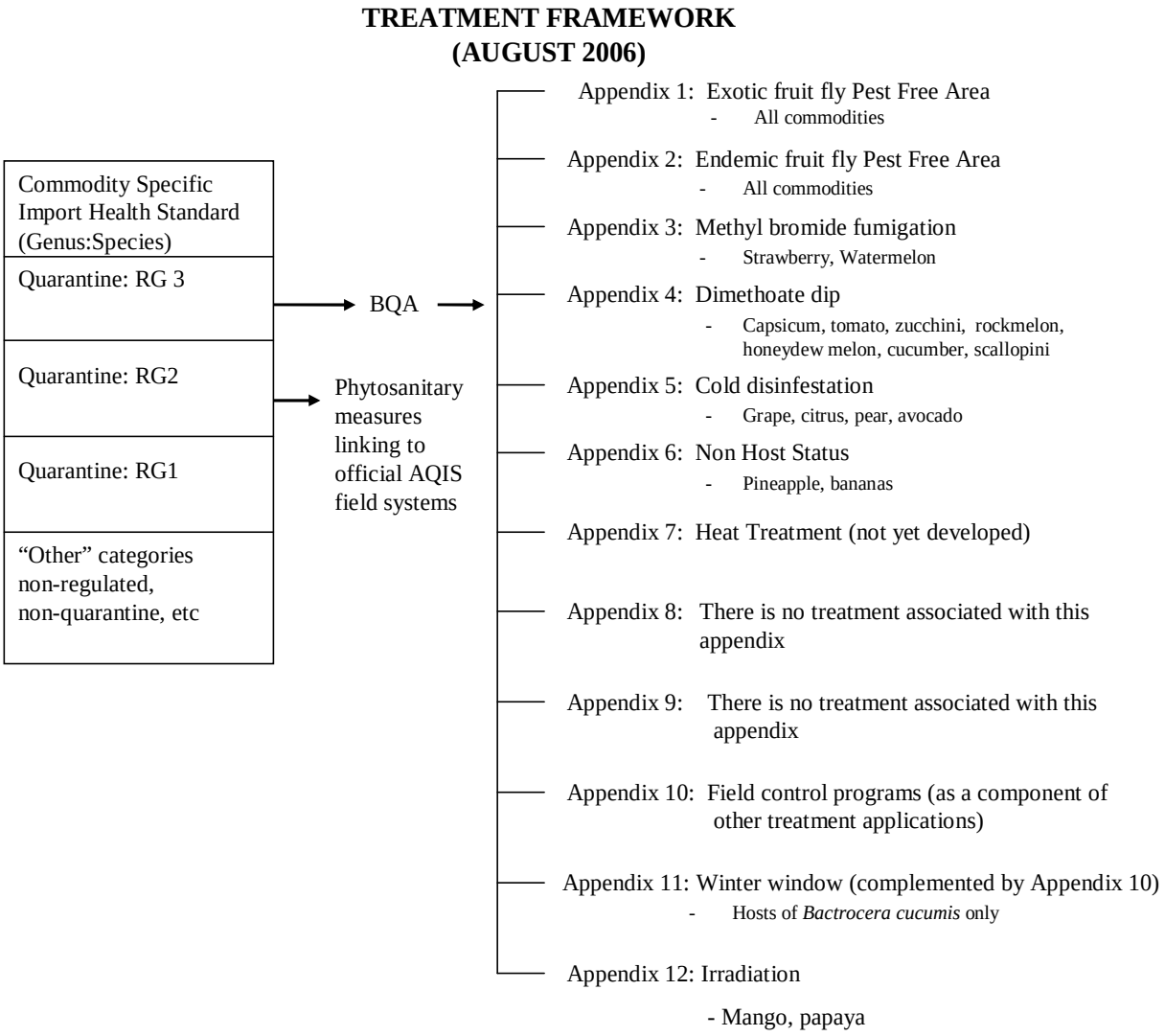


Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Avocado *Persea americana*	Area freedom	✓	✓		✓	"The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia" "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid" **EXDOC ENDORSEMENT # 1641** **OR** The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sunblotch viroid, The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 1582**
Avocado	Cold storage 1°C (±0.2°C) for 16 days	✓	✓	✓	✓	"The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia" "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against Pseudocercospora purpurea and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid" **EXDOC ENDORSEMENT # 1649** **OR** The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from Pseudocercospora purpurea and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sunblotch viroid, The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 1585**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Banana *Musa spp.*	Non-host status	✓	✓		✓	"The bananas have been visually inspected in accordance with appropriate official procedures and found to be free from any regulated pests." "The bananas have undergone appropriate pest control activities that are effective agains Maconellicoccus hirsutus" "The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significane in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS - **OR** The bananas have been visually inspected in accordance with appropriate official procedures and found to be free from any regulated pests." "The bananas have been sourced from an area free (verified by an official detection survey) from Maconellicoccus hirsutus" "The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significane in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS
Capsicum *Capsicum annuum*	Area freedom		✓		✓	"The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" " The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1637**
Capsicum*	Dimethoate (spray only) 400ppm and fruit must be sprayed for a minimum of one minute	✓	✓	✓	✓	"The capsicums in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF". **EXDOC ENDORSEMENT # 1642** If required "The Capsicums in this consignment have been Fumigated with methyl bromide at the rate of 32gm per cubic metre for 2 hours at 21°C at a maximum of 50% chamber capacity"

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Citrus	Area Freedom	QLD	✓		✓	"The citrus in this consignment has been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa* and *Xanthomonas axonopodis pv citri*" **EXDOC ENDORSEMENT # 1638** **OR** - The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, - The citrus in this consignment have undergone appropriate pest control activities that are effective against *Guignardia citricarpa*, - The citrus in this consignment have been sourced from an area free (verified by an official detection survey) from *Xanthomonas axonopodis pv citri*, - The citrus in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 3211**
Citrus	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	QLD	QLD	✓	✓	"The citrus in this consignment has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The citrus in this consignment has undergone appropriate pest control activities that are effective against Guignardia citricarpa and Xanthomonas axonopodis pv citri" **EXDOC ENDORSEMENT # 1648** **OR** - The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, - The citrus in this consignment have undergone appropriate pest control activities that are effective against *Guignardia citricarpa*, - The citrus in this consignment have been sourced from an area free (verified by an official detection survey) from *Xanthomonas axonopodis pv citri*, - The citrus in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 3212**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	- ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Cucumber *Cucumis sativus*	Area Freedom		✓		✓	- "The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1639**
Cucumber*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	- "The cucumbers in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1643**
Cucumber	Winter window	✓	✓		✓	- The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, - The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, - The cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 1627**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Grapes *Vitis vinifera*	Area freedom	✓	✓		✓	- The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, - The grapes in this consignment have been treated in accordance with Appendix 2 (Area freedom) of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, -The grapes in this consignment have been treated for *Lactrodectus hasselti* (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, - The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis,* - The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccis hirsutus.* **EXDOC ENDORSEMENT # 1574**
Grapes	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	✓		✓	✓	- The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to the free from any visually detectable quarantine pests, specified by the New Zeland Ministry of Agriculture and Forestry - The grapes in this consignment have been treated in accordance with Appendix 5 (cold storage) of the Arrangement between New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia - The grapes in this consignment have been treated for *Latrodectus hasselti* (Red back spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes - The grapes in this consignment have undergone appropriate pest control activity that is effective against Conogethes punctiferalis - The grapes in this consignment have been sourced from an area free (verified by official detection survey) from *Maconellicoccis hirsutus* - **EXDOC ENDORSEMENT # 1577**
Honeydew *Cucumis melo*	Area freedom		✓		✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1640**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Honeydew*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1644**
Honeydew* (1 May – 30 Sep)	Winter Window	✓	✓		✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1628**
Mango *Mangifera indica*	Irradiation			✓	✓	- The mangoes in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT # 3287**
Papaya *Carica papaya*	Irradiation 250 Gy			✓	✓	- The papaya in this consignment have undergone appropriate pest control activities that are effective against Conogethes punctiferalis - The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT # 3425**
Papaya	In-field controls Irradiation 150 Gy	✓	✓	✓	✓	- The papaya in this consignment have undergone appropriate pest control activities that are effective against Conogethes punctiferalis - The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT # 3425**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Pears *Pyrus communis*	Area Freedom		✓		✓	- "The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1575**
Pears	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days			✓	✓	- "The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1578**
Pineapple *Ananas comosus* (smooth cayenne only)	Non-host status				✓	- "The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1579**
Pumpkin *Cucurbita pepo &* *cucurbita moschata*	Area freedom		✓		✓	- "The pumpkins in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pumpkins in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1918**
Rockmelon *Cucumis melo*	Area freedom		✓		✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF" **EXDOC ENDORSEMENT # 1631**
Rockmelon* (1 May – 30 Sep)	Winter Window	✓	✓		✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1630**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Rockmelon	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute			✓	✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" **EXDOC ENDORSEMENT # 1646**
Scallopini *Cucurbita maxima & cucurbita pepo*	Area freedom		✓		✓	- "The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1632**
Scallopini*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	- "The scallopinis in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1633**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Scallopini	Winter window					- "The Scallopini in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The Scallopini in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The Scaloppini in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Strawberry *Fragaria spp*	Area freedom		✓		✓	- "The strawberries in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1573**
Strawberry	Methyl bromide 48g/m^3 for 3 hours at a temperature of at least 15°C			✓	✓	- "The strawberries in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1576**
Tomato *Lycopersicon csculentum*	Area freedom		✓		✓	- "The tomatoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1634**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Watermelon *Citrullus lanatus*	Area Freedom		✓		✓	- "The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1626**
Watermelon	Methyl bromide 32g/m^3 for 4 hours at a temperature of 21°C to 26°C	✓	✓	✓	✓	- "The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1626**
Watermelon (1 May – 30 Sep)	Winter Window	✓	✓		✓	- "The watermelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1629**
Zucchini *Cucurbita pepo*	Area freedom		✓		✓	- "The zucchinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1636**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	- ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Zucchini	Winter Window	✓	✓		✓	- "The Zucchinis in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The Zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The Zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 3339**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

2.2 Appendix 1 – Country freedom from fruit fly

MAF recognise Australia is free of several species of fruit fly of economic significance to New Zealand (based on MAF Biosecurity Authority Standard 128.03.07).

Australia's freedom status for these flies is maintained through quarantine restrictions and a national monitoring program. The monitoring program is managed by the Office of the Chief Plant Protection Officer (OCPPO) and consists of exotic fruit fly trapping and monitoring regimes conducted at international airports and seaports.

2.3 Appendix 2 – Area freedom districts within Australia

2.3.1 General requirements

Appendix 2 refers to economic species of fruit flies which are endemic to Australia for which, through trapping and monitoring regimes, area freedom for specific species of fly have been established. The areas listed below have been audited and accepted by MAF as complying with MAF Biosecurity Authority Standard 158.03.06.

Area freedom will be assumed, unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. One or more larvae or pupae are found in locally grown fruit; or
. Two male fruit flies are trapped within 400 metres of each other, within a 14-day period; or
. A single female fly is trapped.

In this case, "Area Freedom" will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of MAF Biosecurity Authority Standard 158.03.06, the suspension period will be reduced to;

. one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site;

. Should 2 outbreak sites occur within 1 – 3 km of each other a 30km outbreak zone will be applied, the zone will be centred on a point mid-distance between two outbreaks.

State Departments of Agriculture (or equivalent) must report all fruit fly finds in the recognised zones to the AQIS Canberra office within 48 hours of detection and identification. This information will then be supplied to MAF at the earliest opportunity.

2.3.2 Approved area freedom districts

Districts approved by MAF are listed below.

Riverina – MIA

This area covers the horticulture growing districts along the Murrumbidgee River (as well as the township of Hillston on the Lachlan River), and includes (but is not excluded to) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrandera and Darlington Point and towns located between;

Area (b) is the Hillston District.

Area (c) is the Menindee District.

Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and areas between.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and areas between.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and areas between.

Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri,Barmera, Waikerie and areas between.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, the Shire of Mildura and areas between.

Area (i) the Mypolonga Township surrounds.

Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

The Ord River Irrigation Area – Western Australia

This area covers the Ord River Irrigation Area (ORIA) as outlined below. This is for Mediterranean fruit fly area freedom only.

Area (j) Ord River Irrigation Area (Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the townsite of Kununurra and north-west of the Ord River).

The Shepparton Irrigation Region (SIR)

Area (k) Production areas and townships of Cobram, Koonoomoo, Invergordon, Numurkah, Katandra West, Katamatite, Wunghnu, Tallygaroopna, Congupna,Merrigum, Kyabram, Lancaster, Girgarre, Stanhope, Tongala, Shepparton, Ardmona, Coomboona, Undera, Mooroopna, Arcadia, Kialla, Murchison, Toolamba, Tatura, Dhurringile, Yarroweyah, Strathmerton, Katunga, Echuca, Colbinabbin, Corop, Rochester, Lockington, Rushworth, Wyuna, Bunbartha, Barmah, Picola, Nathalia, Waaia, and Bearii and seasonal tomato production areas.

NOTE: **Should any stages of Risk Group 3 fruit fly (alive or dead) be found during AQIS or Industry inspections in Australia, AQIS will inform the relevant State Department of Agriculture of the detection. AQIS will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.**
Should any stages of Risk Group 3 fruit fly (either alive or dead) be found during MAF import inspections, area freedom certification will be suspended for all districts of Australia until an AQIS audit determines the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on results of the AQIS audit.

Should any stages of a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

2.4 Appendix 3 – Fumigation

This treatment pathway allows the export of watermelons and strawberries to New Zealand. Fruit must be subjected to Methyl Bromide fumigation.

Watermelons exported under this pathway must also comply with Appendix 10 which covers field control programs of fruit flies. Therefore strawberries and watermelons may not be combined for inspection.

2.5 Appendix 4 – Dimethoate

This treatment pathway allows the export of tomatoes, capsicums, zucchinis, rockmelons, honeydew melons, cucumbers, and scallopini to New Zealand. Fruit must undergo mandatory dimethoate

treatment. For some commodities this appendix must be used in conjunction with Appendix 10 (field control programs).

2.6 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand.

2.7 Appendix 6 – Non host

This pathway deals with commodities which have been accepted by MAF as non-host of endemic Australian fruit flies. Pineapples of the **smooth cayenne variety** and bananas can be exported under this pathway.

Pineapples have been historically accepted as non-hosts to the fruit fly species of economic significance present in Australia.

Bananas are accepted as being non-hosts to the fruit fly species of economic significance present in Australia when in the unripe stage of maturity.

Bananas must be harvested, packed and exported in the unripe (i.e. mature green) stage to New Zealand. Consignments containing bananas at the colour break to full ripe stage will be rejected for export to New Zealand.

2.8 Appendix 7 – Heat treatments

At this time there are no commodities permitted for export under this pathway.

2.9 Appendix 8 – Not currently in use

2.10 Appendix 9 – Not currently in use

2.11 Appendix 10 – Field control programs

The field control programs referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies.**

This appendix is intended to be used in combination with other appendices rather than as a stand alone treatment. For example, cucumber exports to New Zealand under the dimethoate dip treatment require both a post-harvest dip and pre-harvest field control program – a combination of both Appendix 4 and Appendix 10.

Treatment	Commodity
Appendix 3 - Methyl bromide fumigation	watermelon
Appendix 4 – Dimethoate	capsicum, scallopini, cumber honeydew melon, tomato
Appendix 11 – Winter window	rockmelon, honeydew melon, cucumber, watermelon

2.12 Appendix 11 – Winter window

A "winter window" access period has been negotiated between MAF and AQIS, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly). "Winter window" specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment. The access period is between **1 May and 30 September in any year** (arriving in New Zealand).

Rockmelons, scallopini, honeydew melons, zucchini and **cucumbers** can be exported under this appendix from areas recognised free from Mediterranean fruit fly. Currently areas recognised free of Mediterranean fruit fly are the Ord River Irrigation Area and the states of Queensland, New South Wales, Victoria, the Northern Territory, and Tasmania.

As cucumber fruit fly is the only RG3 pest listed for **watermelons,** this commodity can be exported under this appendix from all areas in Australia.

2.13 Appendix 12 – Irradiation

Mangoes and papaya may be exported under this treatment pathway.

A treatment rate of min 250Gy has been prescribed for mangoes and an option of either 250Gy or 150Gy for papaya. The 250Gy treatment for either commodity has been accepted by MAF as effective against arthropod pests.

The 150Gy treatment for papaya is accepted by MAF as an effective treatment for fruit fly pests. If this rate is chosen then effective management practices must be undertaken for *Conogethes punctiferalis* (yellow peach moth).

SECTION 3 GROWER RESPONSIBILITIES

3.1 Summary

Treatment Pathway	Commodity	Requirement
Appendix 2 Area Freedom	Avocadoes	Growers must register with AQIS to maintain field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Capsicum	Growers must register with AQIS for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Grapes	Growers must register with AQIS to maintain field controls for the RG 2 pest *Conogethes punctiferales*. AQIS will certify southern state grapes area free for the RG 2 pest *Maconellicoccus hirsutus*
	Other	Growers are not required to register with AQIS for export under this treatment.
Appendix 3 Fumigation	Strawberries	Growers are not required to register with AQIS for export under this treatment.
	Watermelons	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production
Appendix 4 Dimethoate	Capsicums	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production and also for the control of RG 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Cucumbers, Honeydews, Scallopinis, and Tomatoes	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 5 Cold Treatment	Avocadoes	Growers must register with AQIS to maintain field controls for the RG 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Citrus	Queensland growers must register with AQIS to maintain field controls for the RG 2 pest *Guignardia citricarpa* (citrus black spot). Other state departments survey for citrus black spot, negating the need for grower registration.
	Grapes	Growers must register with AQIS to maintain field controls for the RG2 pest *Conogethes punctiferales* (yellow peach moth). AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus (hibiscus mealybug).
Appendix 6 Non Host	Pineapples	Growers are not required to register with AQIS for smooth cayenne variety pineapples under this treatment. Growers must keep records verifying smooth cayenne parentage.
	Bananas	Growers are required to register with AQIS to maintain field controls for the high impact non fruit fly pest *Maconellicoccus hirsutus* (pink hibiscus mealy bug).
Appendix 10 In field controls	All commodities	All commodities which require Appendix 10 (In field controls for fruit fly) must be registered.
Appendix 11 Winter window	Rockmelons, honeydew melons, cucumbers, watermelons zucchinis and scallopinis	Growers must register with AQIS under Appendix 11 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 12 Irradiation	Mango	Growers are not required to be registered under this pathway
	Papaya	If exporters intend to irradiate at 150Gy growers must register for the control of the high impact non fruit fly pest *Conogethes punctiferales*.

3.2 General requirements

Growers of commodities requiring registration must maintain spray diaries and implement field hygiene requirements that demonstrate appropriate management and recording for those pests listed as RG2 and RG3 in the pest lists (Attachment 1).

3.3 Registration

Application for registration (Attachment 2.1) will be made to the AQIS office in the grower's region. To ensure there are no delays with processing and completing registrations it is recommended that applications be forwarded to AQIS no later than 6 weeks prior to export. Applications are processed in order of receipt; late applications may be subject to delays. Applications must include a property map identifying blocks on which the relevant NZ BQA commodities are grown.

Growers may apply direct to their regional AQIS office or to the packhouse they are supplying. Packhouses must forward any grower applications through to AQIS as soon as possible for inclusion on the regions “master” grower/packer list.

Once application for registration is received regional AQIS staff will organise a time to visit the property to conduct a preliminary audit. During the visit the inspector will ensure the grower(s) are aware of their responsibilities under the SOM, check relevant documentation eg spray diaries, conduct an inspection of the property (registered blocks), and will allocate a grower registration number.

Growers that have previously registered under this arrangement in the previous season without non conformance will not require an AQIS visit prior to export commencement. However, an audit must be performed early in the season.

NOTE: **In the above circumstance, growers MUST notify AQIS of their intent to commence export at least 6 weeks prior to export. Growers must provide evidence that required control measures have been carried out (eg spray diaries). If AQIS approval is granted, a time for an audit visit will be organised. Failure to comply with these directions may mean growers, irrespective of previous participation, will require an “initial audit” before being allowed to commence export.**

3.4 Orchard responsibilities

Growers must apply recommended field controls a minimum of 4 weeks prior to commencement of harvest. Field monitoring and spray diary records must be kept for all activities relating to registered blocks. The applicable grower declaration form (Attachments 2.13, and 2.14) for the product must be completed and accompany each consignment of product intended for export.

NOTE: the Queensland Department of Primary Industries (QDPI) previously issued a farm note (F76/DEC92) which detailed requirements for field control programs against infestation of *Bactrocera cucumis*, these constituted the minimum requirements for the control of fruit fly. This farm note is no longer in print but the requirements are still accepted by AQIS. Newer chemicals developed and registered for the control of fruit fly may be utilised. All spray programs to meet AQIS requirements must be carried out at the recommended label rates. All activities relating to field controls must be recorded and held on file for a 12 month period.

Growers are permitted to use the services of a state registered crop monitor. Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered grower. Records including spray regime and recommendations must be available to AQIS upon request.

NOTE: All cartons of produce must be marked with some form of grower and packhouse identification to enable traceback.

3.4.1 Citrus growers

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer) — however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the southern states of New South Wales, Victoria and South Australia are not specifically required to be registered for this program, monitoring and spray diaries must be kept because of the RG2 pest *Phyllocnistis citrella*.

3.4.2 Avocado growers

All avocadoes must be sourced from growers and blocks registered with an official tree certification scheme (such as the Avocado Nursery Voluntary Accreditation Scheme or relevant state departments) to ensure freedom from avocado sun blotch viroid and undergone appropriate pest control activities that are effective against or been sourced from an area free (verified by an official detection survey) from cercospora spot blotch (*Pseudocercospora purpurea).*

In addition to the standard grower requirements listed in Section 3.3, avocado growers must supply the following documented evidence for registration:

- grower maps to include indexed and non-indexed fruit;
- official verification of orchard freedom from sun blotch viroid;
- sterilisation procedures between indexed and non-indexed blocks;
- buffer zone/s between indexed and non indexed blocks (i.e. row spacing between blocks); and
- pruning procedures to prevent sun blotch viroid re-infestation (i.e. no foliage or fruit contact with soil or neighbouring avocado trees)

NOTE: Further details on avocado accreditation for sun blotch viroid can be sourced from the Australian Avocado Growers Association or State Government Departments of Agriculture (or equivalents).

3.5 Audits

AQIS will audit growers to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency*

Growers will receive an initial audit prior to season commencement (or early in export season if previously registered subject to conditions above) and one further audit during the season.

For tomatoes and winter window commodities, AQIS will undertake monthly audits of the property throughout the growing/harvesting season in the initial season (where substantial compliance is recorded then audit frequency will be reduced to 2 monthly intervals).

AQIS will conduct audits of registered growers throughout the growing/harvesting season. All audits of growers will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

NOTE: the AQIS audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure the requirements of the new treatment are being met, and to identify any problems or potential problems with implementing the treatment.

All AQIS audits will be "announced" giving the grower at least two days notice.

Unannounced monitoring audits may be conducted if they are deemed necessary by the Regional Export Manager. Unannounced monitoring audits are not chargeable unless major non-conformances are detected.

AQIS audits of grower responsibilities may be conducted simultaneously with packhouse and/or exporter audits.

3.5.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A grower found to be not managing orchard/s in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

The timing of the follow up audit is dependent on the problem and its relationship to growing/harvesting of the current crop. AQIS inspectors will determine if follow up audits are required.

3.5.2 Packhouse Approved Arrangement systems

Where a packhouse has an Approved Arrangement (AA) with AQIS and is packing a commodity for which grower registration is required, the packhouse must register and audit growers in the following manner:

. on initial registration;
. following registration at least once during the growing season; and
. in subsequent seasons once during each growing season.

During AQIS auditing of AA establishments, a sample of registered growers will be reviewed for compliance with the requirements of the SOM. If a major non-conformance is detected, the suspension of the packhouse may be considered necessary as it is the packhouse that is responsible for ensuring compliance with AQIS/New Zealand requirements. AQIS audits of growers registered by the packhouse will be conducted on the following basis:

. in the initial year of registration – 5% of all growers;
. subject to compliance the previous year – 2½% of all growers;
. in non-conformances were detected at a previous audit – increase random selection of growers to 10% of all growers.

3.5.3 Security and supervision

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment

SECTION 4 CROP MONITOR RESPONSIBILITIES

4.1 Registration

Crop monitors must register with AQIS (Attachment 2.4) to undertake crop monitoring duties for the NZ BQA.

A crop monitor will include in their application, details of relevant registered growers and the commodities covered.

4.2 Audit

Crop monitors will provide registered grower property records upon AQIS/MAF request. AQIS will perform random audits of each registered crop monitor at least once per year/season for each commodity field monitoring service provided. Audits will include randomly selected growers.

If three growers (minimum) are covered by the same crop monitor, and audits reveal substantial compliance, additional grower audits of the crop monitor may be waived by the Export Manager for that year/season.

All audits of crop monitors will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

4.3 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A crop monitor found to be not managing responsibilities in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

SECTION 5 PACKHOUSE RESPONSIBILITIES

5.1 General requirements

Packhouses are required to maintain secure conditions for NZ BQA commodities and have documented systems in place to ensure grower identification and segregation is maintained.

All cartons must be marked with a standard trade description in accordance with the *Export Control (Plants and Plant Products) Orders 2005* and some form of grower and packhouse identification.

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, packhouses (where applicable) must be registered specifically for New Zealand. Application for registration (Attachment 2.2) will be made directly to AQIS regional offices.

5.2 Documentation

Packhouses are responsible for maintaining all documentation and must provide to AQIS the following upon request:

i. copy packhouse registration form;
ii. list of growers registered with AQIS who supply to the establishment;
iii. copy of grower registration forms;
iv. receival/despatch records of produce from individual growers; and
v. acceptance of inspection, loadout and security delegation (where applicable)

Export documentation will be held on file for 2 years (minimum) and are subject to AQIS/MAF audit.

5.3 Delegation of exporter responsibilities

5.3.1 General

Where a packhouse has been delegated and accepted exporter responsibilities in accordance with directions contained in the SOM, the packhouse must undertake and record all functions delegated to them. Delegated responsibilities may include:

. the security of cleared/treated produce whilst on premise;

. supervision of loading and unloading of all consignments into and out of the packhouse premise;

. clear identification of all New Zealand destined produce;

. documenting all incoming and outgoing produce intended for export under the NZ BQA; and

. inspections.

Packhouses will be audited to ensure requirements for these functions are known.

5.3.2 Security and supervision

The exporter delegate (ED) will arrange appropriate transportation of treated products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of delegation acceptance on file.

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to Export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by AQIS.

5.3.3 Inspection

Exporter inspection may be undertaken at a packhouse when delegated. See Section 7.2 for more details about exporter delegate inspections. A packhouse inspection will satisfy requirements for an exporter inspection if performed by an approved ED. Inspections must be recorded (refer to Attachment 2.6) and retained for audit purposes. A copy of the inspection record must accompany the consignment to the AQIS inspection.

The exporter/ED can elect AQIS inspection on a grower or consignment line basis. If the exporter/ED elects to undertake a consignment line inspection, then a copy of the grower line inspection record must be presented at AQIS inspection with the exporter/ED inspection record.

5.4 Audit

AQIS will audit packhouses to ensure compliance with NZ BQA requirements. Details of these audits can be found in *Table 7 – Audit Frequency.*

Grower registers, staff training, completion and storage of records and security responsibilities will be audited by AQIS. Variance to audit requirements can be made at the discretion of the Export Manager.

AA packhouses will be audited for compliance with the NZ BQA as per the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP

All audits of packhouses will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

AQIS audits of packhouse responsibilities may be conducted simultaneously with grower and/or exporter audits.

5.4.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office

must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A packhouse found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

5.5 Approved Arrangements – Packhouse

5.5.1 General requirements

The following activities must be undertaken by AA packhouses:

(a) All individual packages must include grower numbers or equivalent codes and packhouse numbers.

(b) Declared fruit fly free area packhouses must have a register of all growers' names and addresses and allocated grower numbers for all NZ BQA commodities.

(c) Should area freedom suspension zones be established, packhouses must be able to provide separate registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals are required to show procedures for identification, segregation and packing processes to ensure "area free" commodities cannot be contaminated whilst on the establishment and/or surrounds.

(d) It is recommended contingency plans are incorporated within quality manuals to address additional procedures required in the event of fruit fly outbreaks. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

(e) Packhouses not undertaking official disinfestation treatments and that do not have Risk Group 2 or 3 pests; will not need to include additional systems to their Quality Manuals.

(f) Packhouses with Risk Group 2 or 3 pests will need to ensure grower registration, commodity segregation; identification and inspections meet the NZ BQA. It is likely some quality manuals will need to be amended or have attached an appendix to meet the new export requirements for NZ BQA.

(g) To gain accreditation, five joint inspections will be undertaken with AQIS to assess the ability of packhouse staff to perform inspections in accordance with the directions contained in the SOM.

AA packhouse conducting "treatments" under the NZ BQA must be registered for this purpose in addition to normal registration requirements. Section 4.7 of the SOM outlines the requirements for Treatment Centres.

5.5.2 Audit

AA packhouses with NZ BQA responsibilities incorporated into their current Quality Manuals will be audited in conjunction with standard auditing requirements.

Those choosing to separate NZ BQA commodity responsibilities from other AA accreditation will have the two systems audited separately but within the usual audit schedules applying to the establishment.

Establishments with RG 2 pests will have a percentage of those registered growers audited to ensure compliance with the NZ BQA.

Packhouses who elect to register growers of commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. On initial registration,
. Following registration, at least once during the growing season; and
. Continual registration- once during each growing season.

For AQIS audits, registered growers will be randomly selected on the following basis;

. Initial year of registration - 5% of all growers registered by the packhouse
. Subsequent growing seasons- 2.5% of all growers registered by the packhouse (subject to compliance from previous year)
. Non-conformance at a previous audit -10% of all growers registered by the packhouse

Should a major nonconformance be detected at audit, the packhouses will be suspended from the New Zealand program immediately. Depending on the type of nonconformance, suspension from the AQIS AA may be considered. Such a decision will be made by the AQIS AA Contact Officer in conjunction with the State Regional Manager and Canberra Office.

5.5.3 Inspection requirements

AA packhouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted when the AA establishment has systems in place that;

. Address grower field controls (horticulture extension officers, reference to crop monitors etc.)
. Have some type of formal receival inspection records
. Have sorter and grader recording systems within the processing line.

In order to properly document inspections for NZ BQA commodities, AA packhouse will undertake “in-line” consignment inspections according to the following table;

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 3 sets out sampling regimes that can be applied as in-line process controls within an AA packhouse. The maximum continuous time run for New Zealand is a 24 hour process. It is extremely important this type of in-line process control is undertaken and recorded for each consignment run of NZ BQA commodities.

All in-line process controls (Table 3) must be undertaken by an AQIS Approved Inspector. Where inspections are performed as per Table 3, individual grower line inspections are not required.

During inspection, any fruits/vegetables that are soft, bruised or display rot spots will be cut to determine evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all produce cut will be recorded on the inspection sheets.

Packhouse can make up any type of sampling system based on Table 3. **However**, packhouse must document what regime is to be used before the initial production run and ensure the sampling regime is representative of the consignment/s being assembled.

Packhouse requirements pertaining to identification, segregation, security and records for all NZ BQA produce must be part of the Process Management System submitted for AQIS approval.

NOTE: Packhouses will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

5.5.4 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers will be included on all packages covered by the NZ BQA.

For produce being transferred intrastate or interstate, documentation will be required to ensure the receiving company and AQIS inspector can verify security and integrity of the consignment on arrival. A declaration to the following effect will be made on the “EX 222”or internal transfer note as follows:

"The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by MAF and specified tolerances have not been exceeded."

Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

5.5.5 Post treatment security

Where an AA packhouse has accepted exporter delegation for the security and loading supervision of NZ BQA commodities, the packhouse will nominate the person/s who will be responsible for carrying out and recording the following:

. The security of cleared/treated produce whilst on the premises

. Supervision of loading and unloading of all consignments into and out of the premises intended for export under NZ BQA

. Clear identification of all NZ BQA produce

. Documenting all incoming and outgoing produce intended for export to New Zealand

The exporter/ED will arrange appropriate transportation of certified NZ BQA products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of acceptance of duties on file.

For product not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export (Ex 28) and signed by an AQIS inspection officer.

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES

6.1 General requirements

Treatment centres must have documented systems of identification, segregation, process controls, post security treatment and supervision responsibilities.

All staff must be appropriately trained to carry out designated responsibilities.

6.2 Registration

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, all treatment centres must be registered (Attachment 2.3) specifically for New Zealand. Application for registration will be made directly to AQIS Regional Offices.

6.3 Audit

AQIS will audit treatment facilities to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency.*

Product identification, calibration, load out activity, completion and storage of records and security responsibilities will be audited by AQIS. Records pertaining to these aspects will be checked for accuracy at audit. Variance to audit requirements can be made at the discretion of the Export Manager.

All audits of treatment facilities will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

AQIS audits of treatment facility responsibilities may be conducted simultaneously with grower and/or exporter audits.

6.3.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A treatment centre found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

6.4 Post treatment security

6.4.1 Registration

The exporter must nominate, in their application for registration (Attachment 2.5), the person/s who will be responsible for carrying out and recording the following:

- security of treated produce whilst on the premises;
- supervision of loading and unloading of all consignments into and out of the premises;
- identification and segregation of consignments intended to be treated; and
- documenting all incoming and outgoing produce intended to be exported to New Zealand.

6.4.2 General requirements

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment

Staff loading containers will ensure minimum time delays in moving commodities from the secure area into container/s. Product should not be left in an unsecured environment for more than 15 minutes.

Approved security measures for transporting of produce will include either;

. Full shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet),

. Full enclosure of each pallet with shade mesh cloth with a maximum opening of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),

. Loading direct into panotech vans with units sealed by AQIS officers

. Cool storing unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product (except commodities treated under area freedom)

. Cool storing protected in secure packages at any temperature (except commodities treated under Area freedom)

Should any treatment operator/packhouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Export Manager for assessment and approval.

6.5 Post treatment transportation

The exporter/ED will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

Products transported to another destination for export loading must be subject to strict security provisions. The exporter/ED will ensure the transport medium is clean and other products (i.e. untreated/non-secure commodities), that could cause cross infestation are not loaded without taking appropriate security precautions. That is, either the other commodities are secured or the New Zealand produce is secured (as per Section 6.4.2).

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by AQIS.

NOTE: Export Managers may approve variations to the above documentation requirements to suit a particular state's operations. The use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is used, it is recommended audits be undertaken frequently to enable confidence within the systems.

Should inspecting officers find breaches to security during transit; consignments will be rejected. For some commodities reconditioning and re-inspection may occur.

AQIS will audit load out facilities to ensure compliance is being maintained.

6.6 Treatment Appendices

6.6.1 Appendix 3 – Fumigation

All fumigations must be performed with the amount of product space equal to or less than 50% of total air space within the chamber/tent. Fumigation treatment requirements are detailed in Table 4.

Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21 - 26°C and above	32g/m^3	Watermelon - 4 hours
15°C and above	48g/m^3	Strawberry - 3 hours

Treatment facilities must maintain documented systems. Systems will include:

1. Incoming product identification.
2. Segregation from other produce and clearly marked “New Zealand”
3. Treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment (i.e. batch numbers)
4. Treatment records
5. How measuring equipment is calibrated, how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.

It is recommended individual procedures accompanied by work instructions be written to define the processes and controls. The following criteria should be considered:

- Address how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent,
- Define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.
- How many units will be sampled to measure lowest flesh temperature of product?
- If tent fumigation is being performed, by whom and when is the tent checked for holes/tears?
- Who, how and when is temperature measuring equipment calibrated? How is this recorded?
- Where the in-process gas monitoring lines are located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?
- Who checks required fumigation dosage rate once temperature and volume are calculated?
- How is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?
- Who is responsible for checking the correct amount of fumigant is entered into the chamber/tent?
- What procedures are applied to ensure no leaks from the chamber or tent are evident?
- What period of time after initial fumigant is released into the chamber/tent will verification readings be made and using what type of equipment?

- Calibration of gas measuring equipment is undertaken how frequently and who does this?
- Calibration details are recorded where?
- At completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?
- Who has the authority to sign off the treatment certificates to enable release of produce?
- How is product identified as being treated?

NOTE: Regional Export Managers may approve variations to the above documentation requirements to suit a particular state's operating requirements.

6.6.1.2 AQIS Supervision

- Flexible tents- AQIS inspection staff will attend all fumigations being undertaken for NZ BQA. Inspection staff will attend either at commencement of fumigation or prior to completion. AQIS will verify treatment dosages, calculations and gas retention general process controls.

- Fixed capacity (chambers or fixed tents)-Treatment centres will be supervised at the commencement of the season, and then, providing substantial compliance 2 - 3 times during the season.

Fumigation centres must advise their regional AQIS office 24 hours in advance of intended fumigation treatments. If AQIS is unable to attend at the required times, arrangements can be made to allow treatment to go ahead but define how AQIS will manage the supervision requirements.

6.6.2 Appendix 4 – Dimethoate
6.6.2.1 General requirements

Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES

Commodity	Dip strength	Tolerance	Dip/spray	Time
Tomato	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Tomato	400ppm	±6% (±24ppm)	Spray	Spray for at least 10 seconds, and remain wet for at least 1 minute
Capsicum	400ppm	±6% (±24ppm)	Spray	Spray for at least 1 minute
Zucchini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Rockmelon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Cucumber	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Scallopini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute

Note: The minimum tolerance for dimethoate sample results is 376ppm. Treatment centres will be suspended if samples fall below this level. Treatment centres will be reinstated when AQIS has received notification of a conforming dimethoate sample.

Treatment facilities must maintain documented systems. Systems will include:

- Chemical to must be used by expiry date;
- Chemical to be stored at temperatures below 40°C. It has been determined when temperatures rise above 46°C (for even 1 day), the active ingredient will degrade;
- All products will be free of soil;
- The treatment must be the last process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted;

- The treatment centre will nominate a person/s to prepare and record each consignment or batch lot;
- The treatment centre will prepare treatments immediately prior to use and have systems in place for recording solution strengths. The treatment centre will also record details of the mixing of solution and any topping up during processing which allows for chemical wash out. Details will include times and indicate volumes of product treated at the time of topping up.

Each treatment operator will be required to document their method/s of dipping and must include:

- Size of the dip tank
- Method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc)
- Maximum volume of water required for any/each treatment
- Amount of chemical needed to achieve the required ppm level active ingredient
- Minimum allowable solution level
- Maintenance of active ingredient level (i.e. "top up" levels)
- Treatment operators will have a system in place identifying treated and untreated products. Labels must be clear and visible on pallets/bins/crates etc
- After dipping, all products must be identified as being "treated".

NOTE: Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems demonstrating solution can be carried over without losing efficacy.

6.6.2.2 Waxed produce

The application of waxes or oils prior to dimethoate treatment is prohibited. For treated produce, application of waxes or oils will only be allowed at the discretion of the Export Manager.

6.6.2.3 Sampling

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment. AQIS inspection staff will undertake analysis of chemical dipping strengths on the following basis:

AQIS sampling – Monthly during the first season. For continuous registration sampling may be extended to twice during the season once substantial compliance has been established.

Industry sampling – Monthly for the first 3 months of each season and one additional sample if the treatment period is greater than 4 months.

6.6.2.4 AQIS audit

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season.

. **First year of registration**

- Monthly during the treatment season.

. **Continuous registration without non-conformance**

- Twice during the treatment season.

6.6.3 Appendix 5 – Cold treatment

6.6.3.1 General requirements

Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS

Commodity	Temperature	Period
Pear, tablegrape, citrus fruits (option 1)	≤ 0°C	13 days
Pear, tablegrape, citrus fruits (option 2)	1°C (± 0.6°C)	16 days
Avocadoes	1°C (± 0.2°C)	16 days

Cold storage treatment facilities must maintain documented systems. Systems will include:

- Minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of product or less. For each additional 250 cu.m. of product, or part thereof, one additional pulp sensor will be used;
- Thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to AQIS;
- The warmest area of each cool storage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One pulp sensor will be placed at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors;
- For operators of controlled atmosphere cool stores (pome fruits), records must be available which detail 16 continuous days of treatment at 1°C ± 0.6°C or 13 continuous days of treatment of 0°C or below during the storage period.

6.6.3.2 Temperature recording

- Continuous - strip charts or data log sheets for each cold treatment. Temperature recorders must be capable of monitoring pulp temperatures. Air temperature recorders are not acceptable.

- Intermittent - sensor temperatures will be manually recorded twice daily (morning and afternoon) for each cold treatment and verified once every 4 days by AQIS.

Temperature records will be retained and made available for auditing purposes by AQIS/MAF upon request.

6.6.3.3 Record requirements

Details to be recorded include:

- Date and results of sensor/probe calibrations
- Date chamber was loaded with produce
- Type and variety of produce treated, the quantity by lots involved, all to be identified by packhouse and exporter.
- Date the maximum pulp temperatures initially recorded 1°C ± 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded. Or, date the pulp temperature of the fruit within the chamber recorded 13 days at 0°/below or equivalent.
- Either continuous print out records or daily records of a.m. and p.m. temperatures within the chamber throughout the treatment program.

- Date produce was cleared from chamber with details of post treatment security and dispatch of produce.
- Date and results of re-calibration of sensors following completion of treatment.

6.6.3.4 AQIS supervision

AQIS will supervise calibration of sensors at commencement and completion of each cold disinfestation treatment.

Where the refrigeration unit is equipped with a print out recorder, AQIS will initiate treatment once the chamber has stabilised at the required temperature.

For cold storage centres using manual recording devices, AQIS inspection staff will supervise the disinfestation treatment every 3-4 days.

AQIS will verify and sign satisfactorily completed treatment records. Both AQIS and the treatment facility are to maintain copies of the treatments on file.

6.6.4 Appendix 12 – Irradiation

The treatment rate specified by MAF for mangoes exported from Australia is Dmin 250Gy.

The treatment rate specified by MAF for papaya exported from Australia is Dmin 150Gy. New Zealand MAFF requires Australia to undertake appropriate pest control activities for the *Conogethes punctiferalis* (yellow peach moth) prior to export (This may include irradiation at 250Gy).

The Food Standards Australia & New Zealand (FSANZ) standard for irradiated tropical fruits has a Dmax of 1000gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au

Treatment centres will be required to carry out verification testing to determine the required response on target organisms has been achieved in accordance with International Standard Phytosanitary Measures (ISPM) # 18 - *Guidelines for the use of irradiation as a phytosanitary measure* (www.ippc.int). The records of this verification must be made available to AQIS/MAF upon request.

Ionizing radiation may be provided by radioactive isotopes (gamma rays from cobalt-60), electrons generated from machine sources (up to 10 MeV), or by x-rays (up to 5 MeV) (limits set by Codex Alimentarius). The unit of measurement for absorbed dose is gray (Gy).

Treatment procedures must ensure the minimum absorbed dose (Dmin) is fully attained throughout the commodity to provide the prescribed level of efficacy. Owing to the differences in the configuration of treatment lots, higher doses may be required to ensure the Dmin is achieved throughout the configured consignment or lot; these doses must not exceed the Dmax.

6.6.4.1 Dosimetry

Dosimetry ensures the required Dmin for a particular commodity was delivered to all parts of the consignment. The following conditions for dosimetry systems must be in place:

- Capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax)

- Calibrated in accordance with international standards or appropriate national standards (ISO/ASTM 51261 "Selection and Calibration of Dosimetry Systems for Radiation Processing", ISO/ASTM 51204 "Dosimetry in Gamma Irradiation Facilities for Food Processing" and ASTM guide - F1355 "Irradiation of Fresh Fruits as a Phytosanitary Treatment", and ISPM 18)
- Appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
- Evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
- Consider variations due to density and composition of the material treated, shape and size, orientation of the product, stacking, volume and packaging;
- Dose mapping of the product in each geometric packing configuration, arrangement and product density used during routine treatments must be carried out prior to the approval of the facility. Only configurations approved by AQIS can be used for actual treatments;
- All components of the dosimetry system must be calibrated according to documented standard operating procedures. An independent organisation recognized by AQIS should assess performance of the dosimetry system;
- An accurate measurement of absorbed dose in a consignment is critical for determining and monitoring efficacy and is part of the verification process. The required number, location and frequency of these measurements should be prescribed based on the specific equipment, processes, commodities, relevant standards and phytosanitary requirements.

6.6.4.2 Dose Mapping

- Dose mapping studies must be conducted to fully characterize the dose distribution within the irradiation chambers and commodity, and demonstrate the treatment consistently meets the prescribed requirements under defined and controlled conditions. Dose mapping data from a minimum of three runs on any particular configuration must be provided to AQIS for verification of Dmin points etc. A minimum of three runs in a physical configuration is required for verification of Dmin (standard).
- Dose mapping must be done in accordance with documented (proven) standard operating procedures. The information from the dose mapping studies is used in the selection of locations for dosimeters during routine processing.
- Independent dose mapping for incomplete (partially-filled) as well as first and last process loads is required to determine if the absorbed-dose distribution is significantly different from a routine load and to adjust the treatment accordingly.

6.6.4.3 Facility records and traceability

Treatment facility operators must keep and maintain records addressing the areas listed below.

- Appropriate treatment records for phytosanitary purposes must be kept by the irradiation facility to ensure traceability of treated lots. Records for every treatment must be kept.
- Dosimetry records must be kept by the treatment facility for at least one full year after treatment. Records must be made available to AQIS on request.

Records kept by treatment centres should also address the following:
- Identification of facility and responsible parties
- Purpose of treatment
- Target regulated pest(s)
- Lot size, volume and identification, including number of articles or packages
- Identifying markings or characteristics
- Quantity in lot

- Absorbed doses (target and measured)
- Date of treatment
- Observed deviations from treatment specification.

6.7 Tablegrape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti*

6.7.1 General requirements

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern.

MAF have directed AQIS to either undertake stringent field control programs to eliminate this pest or an agreed treatment effective against redback spiders. The Australian tablegrape industry has opted for mandatory fumigation using a sulphur dioxide - carbon dioxide treatment.

In addition to treatment centre registration, fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Treatment centres carrying out fumigations on tablegrapes must meet the general requirements outlined above for treatment centres and the listed criteria detailed in Section 6.5.1 of the SOM.

6.7.2 Treatment

The mandatory fumigation treatment for redback spiders is a **mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes**.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

AQIS inspection staff must sight fumigation treatment records to enable phytosanitary certification of tablegrapes.

6.7.3 Traceability

If a live redback spider is detected during inspection, systems must be in place to allow trace back to individual fumigation treatments.

6.7.4 Additional precautionary measures

Unused packaging carried over to the following season presents an additional pathway for the introduction of Redback spiders into New Zealand.

When carrying unused table grape packaging over, either pest-proofing or disinfestation of the packaging is necessary.

SECTION 7 EXPORTER RESPONSIBILITIES

7.1 General requirements

All exporters of NZ BQA products must be registered with AQIS. Exporter applications (Attachment 2.5) will be made to the appropriate regional AQIS Office.

Applications for registration will include details of the commodities and treatment pathways the exporter intends to use to meet with conditions stipulated in the SOM.

AQIS will accept the application if details of treatment centres are not known at the time, but exports of the particular commodities will not be permitted until relevant information is provided to AQIS.

Whilst exporters can delegate some duties, the exporter will remain ultimately responsible for all activities pertaining to the inspection, security and loading of product following treatment.

Exporters must ensure at all times either directly or by delegation:

. Product security during loading, transport and export consignment consolidation is not compromised and there can be no substitution or cross infestation of product following treatment.

. Exporter inspection requirements as detailed in the SOM are performed by qualified staff and records are kept for all inspections performed.

. Inspection records are given for each grower line presented for AQIS inspection.

. Liaison with AQIS/State Officers takes place as necessary to advise of product movement and inspection requirements,

. Documentation, including phytosanitary certificate endorsements are maintained.

7.2 Exporter Inspection

Where grower or consignment line inspections are performed by the exporter, full details of the inspection performed will be recorded (Attachment 2.6).

Exporter inspections must be undertaken at an appropriate sampling rate, as given in *Table 1* of the SOM.

Export inspection responsibilities delegated to another party will be acknowledged and verified in writing. Copies of documentation will be held on appropriate company filing systems (Attachment 2.5).

Exporters need to ensure all staff undertaking inspection duties are properly trained in pest and weed seed identification of quarantine concern to New Zealand and have been audited by AQIS.

The exporter/ED can elect AQIS inspection on a grower or consignment line basis. If the exporter/ED elects to undertake a consignment line inspection, then a copy of the grower line inspection record must be presented at AQIS inspection with the exporter/ED inspection record.

During exporter inspections, any soft, bruised or rotted products will be cut to determine evidence of fruit fly infestation. Results of products cut will be noted on the inspection record. A copy of this record must be presented with the consignment for AQIS inspection. Inspection records together with other documentation relating to the consignment must be held on file for 2 years and is subject to AQIS/MAF audit.

All inspections, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10.

NOTE: Accredited AA establishments are not required to undertake end-point inspections if procedures enable a 600 unit in-line inspection and the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

7.2.1 Split Consignment Inspections

Following exporter/ED grower line inspections, exporters can elect an AQIS ‘consignment’ inspection even if the 'consignment' is to be split to varying destinations and differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any produce not forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: "Split consignment" procedures cannot be implemented until AQIS has approved the necessary documentation and record keeping systems.

Exporters/importers wanting to reduce MAF on arrival inspections of split consignments must adopt a system which fully documents the management procedures. Any procedure must include:

. Notification of consignment details to MAF as they occur.

. New Zealand communication links (importer and MAF contacts).

. Flow chart detailing how the phytosanitary certificate moves through the system.

7.3 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers, will be included on all packages covered by the NZ BQA.

A declaration to this effect will be made on the Notice of Intention to Export "Export Permit" (EX 28), EX186 (if appropriate), or in the Exporter Declaration/Comments box in an RFP as follows:

> “The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by NZ MAF and specified tolerances have not been exceeded”

It is important that all phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX 28, the exporter must maintain a documented link to the

Notice of Intention to Export (EX28). This system must be approved by the Regional Export Manager.

Trace back for consignments drawn from several RFP's is obtained through the EXDOC system.

7.4 Rejected Produce

If any stages of live fruit fly are found during an exporter/ED inspection, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other NZ BQA produce, and identified as not suitable for export to New Zealand.

The exporter or ED must immediately notify AQIS of the detection.

AQIS will formally advise and suspend the relevant treatment centre pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

Should during the exporter/ED inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS. The product must be identified as failed for export to New Zealand and segregated from all other NZ BQA products. Reconditioning of consignment may occur where applicable.

AQIS will formally advise and suspend the relevant grower pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the occurrence, reinstatement for the NZ BQA may be permitted.

The mutual fumigation recognition arrangement can be used when regulated pests are detected. This arrangement cannot be used as a pre-emptive measure. Please refer to PHYTO for more information (http://www.aqis.gov.au/phyto).

7.5 Security of Produce

Export shipping or airfreight containers will be inspected by a freight forwarding agent where delegated or exporter for cleanliness and condition (any openings in containers will be taped over).

Container inspections can be delegated to a container park. Persons carrying out inspections must be audited to ensure they are aware of their responsibilities. If inspections are carried out at a container park, copies of completed inspection records must be faxed (or sent with container documents) to point of loading and retained on file by both the container park and exporter/freight forwarder etc.

NOTE: It is only necessary to complete the "Container report sheet" for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

7.6 Audit

Exporters will undergo one audit per year. All relevant documentation for NZ BQA consignments must be made available to AQIS upon request. Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter inspections and documentation (i.e. RFP's, EX 186, EX28's and phytosanitary certificates).

Persons approved to act as an ED will undergo two audits per year. Audits will include documentation, knowledge of regulated pests, inspection techniques, sample selection and knowledge of relevant parts of the SOM.

7.6.1 Non-compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

An exporter found to be not managing responsibilities in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

SECTION 8 GOVERNMENT RESPONSIBILITIES

This section details the responsibilities associated for participants under the SOM to ensure requirements of the SOM are adhered to.

All systems will be subject to random audits by the AQIS Canberra office and MAF will audit systems at frequent intervals. The audits will include measurement of pathway compliance from growers (where required) through to final export container loading and associated documentation.

8.1 AQIS Canberra office

The AQIS organisation structure and management flow chart is provided at the end of this section. It is recommended that each AQIS Regional office develop its own organisation structure and management flow chart as it will apply to the management of the NZ BQA, and include this information for distribution within that state.

8.1.1 Manager - Plant Programs

Will be responsible for ensuring;

- All components of the SOM are being complied with consistently, over all commodities and treatments through all states.
- Regular audits of State Departments (where applicable) and AQIS systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the NZ BQA and that a proper record management system is available and easily accessible.
- AQIS Regional offices are conducting audits of AA as detailed in the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP and the requirements of the NZ BQA and this manual.
- Where non-conformances are found, that suitable corrective action is undertaken and verified by AQIS.
- Collate and circulate up to date national lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.
- That all amendments to this manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.
- That audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

8.2 AQIS State Offices

AQIS state offices, through the Regional Managers and Export Managers located in Queensland, New South Wales, Victoria, Northern Territory, Western Australia, Tasmania and South Australia are responsible for the following:

- The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM.
- Ensure all exporters, treatment centres, packhouse and growers (where applicable), are meeting the requirements of the NZ BQA and the directions contained in the SOM.
- Ensure inspection staff are trained in the terms, responsibilities and conditions for all NZ BQA commodities being exported from that state.

- Ensure all required components of the export pathways for commodities are registered for that state.
- Ensure audits (including internal audits), are being conducted at the correct frequency and the measurement of the system and corrective action where required, has been effected and recorded.
- Ensuring Canberra Office (Program Manager) is informed where any breaches of the conditions of this manual are observed.
- Ensuring all inspectors in their state, involved in the NZ BQA export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported in any district of Australia.
- Develop a system of recording registrations, and that such records are maintained so they are auditable.
- Ensuring the Canberra office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

8.2.1 Registration requirements

AQIS offices will implement a registration system where applicable for all growers, packhouses, treatment centres and exporters.

8.2.2 Sampling requirements

For the purpose of the treatments detailed in this manual the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

8.2.3 AQIS inspection procedures

Exporters will provide AQIS with exporter/ED inspection records prior to inspection. If all export documentation is not provided or incomplete, the consignment will not be inspected. If the exporter/ED elects to undertake a consignment line inspection, then a copy of the grower line inspection record must be presented at AQIS inspection along with the exporter/ED inspection record.

Inspections performed by AQIS will be recorded on "Inspection Record - New Zealand" (Attachment 2.6)

NOTE: Alternative types of inspection records can be used as long as they contain the information supplied on the inspection record

AQIS inspectors must conduct inspections at the same sampling rate (Table 1) undertaken by the exporter/ED.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

Packaging must be checked during the inspection for compliance with the *Export Control (Plants and Plant Products) Orders, 2005* and requirements of the SOM.

NOTE: AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

8.2.4 Consignment line samples

Following exporter/ED inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines consist of commodities from a common treatment pathway (can be different growers).

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. The following points may be taken into account in determining selection of sample cartons:

- From the grower submitting the largest grower line within the consignment.
- From the commodity comprising the greatest quantity in the consignment line.
- At least one carton from the commodity seen to present the greatest quarantine risk.
- At least one carton from any known "poorer" performing growers/packers or from a newly registered grower or packer.

Consignment lines passed after AQIS inspection will be identified as "Passed for New Zealand" and immediately segregated. It is recommended exporters implement a system (i.e. stickers on pallets) to make identification of passed consignments easier.

8.2.5 Rejection procedures

A rejection upon inspection by AQIS of either a consignment or grower line does not necessarily indicate a packhouse or grower has breached the conditions of the NZ BQA. However the rejection does indicate a possible problem within the packer/exporter system and will be recorded.

All rejections are to be recorded on AQIS Form Ex 161 (Inspection Advice) and must detail the grower, packer and export pathway through which the commodity has passed.

Exporters/EDs who fail two inspections in any one season must be audited immediately. This will ascertain any reasons AQIS may consider necessary for suspension or corrective actions to be undertaken.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for RG3 pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of "Area Freedom," all districts in that state are suspended. Audit/s must be undertaken at the earliest opportunity.
- Any rejection for RG2 pests – AQIS Canberra office to be informed immediately to consider if audit of grower, packer, exporter or ED is necessary. This may depend on type and quantity of infestation detected. If applicable, the exporter can choose to undertake corrective action (i.e. treatment, withdrawal of the offending grower). Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for AQIS inspection.
- Any rejection for RG1/regulated pests - The consignment can be totally withdrawn or corrective action undertaken. Corrective action can include treatment, withdrawal of the offending grower. Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for AQIS inspection.

8.3 Audit

AQIS inspection staff will conduct audits of applicable growers, packhouse, treatment centres, exporters and exporter's delegates to ensure compliance with relevant section of this manual.

8.3.1 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

- Exporter/delegate inspection records.
- Grower pest monitoring records and pest control diaries (commodity specific).
- Packer training and associated pest identification.
- General hygiene of premises.
- Segregation and identification of produce.
- Staff responsibilities,
- Exporter or exporter's delegate inspection procedures and pest/weed identification skills.

Should auditing fail to identify any breach of the NZ BQA and responsibility of the SOM, all parties will be reinstated.

Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the Export Manager who will co-ordinate necessary action and advise all parties at the earliest opportunity.

Copies of any audit will be given to the relevant components of the pathway audited and kept on file.

Inspectors undertaking these audits must be appropriately trained and accredited.

Table 7 - AQIS AUDIT FREQUENCY

	Initial Year of registration	**Continuous Registration**	**Winter Window**
Grower	Initial audit prior to export + One additional audit during season *** Tomatoes** – Initial audit prior to export + monthly audits of property & spray diaries	One audit early in new season (no initial audit required) *** Tomatoes** – Initial audit prior to export, extending to 2 monthly if substantial compliance is shown	Monthly audits of property & spray diaries * Audits extended to 2 monthly if substantial compliance is shown
Packer	Initial audit prior to export + One additional audit during season	Minimum one audit annually	
Treatment Centre	Monthly audits required in first year **Dimethoate -** One initial audit during the first 10 days of season + 2 audits during the season	**Fumigation -** One annual audit in first 10 days of season (to be conducted during a treatment) + 2-3 times during season **Cold Storage** – One annual during first 3 treatments **Dimethoate –** Two audits per year/season if substantial compliance is shown	
Exporter Delegate	Initial audit prior to export + One additional audit during season	Minimum two audits per year If fail at two AQIS end point inspections, immediate audit required	
Exporter	One audit Annually	One audit Annually	
Crop monitor	One Audit Annually	One audit Annually	

8.4 Fruit Fly Area Freedom – State Departments

State Departments are responsible for the following:

- Where required, ensure the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual state management plans (as submitted to MAF), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of MAF Biosecurity Authority Standards 158.03.06 and 158.03.07 and
- Report any detections of economically significant fruit fly species found within trapping grids to AQIS Canberra Office within 24 hours of identification.

8.4.1 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. The procedures and controls are documented such that they can be readily demonstrated to, and audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of fruit flies and managed under the tri-state agreement between the states of New South Wales, Victoria and South Australia and:

. Reflect the requirements of New Zealand MAF Biosecurity Authority Standard 158.03.06., the
Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

. Management and control procedures for each area which have been accepted by MAF as meeting all the requirements (or equivalence) with the MAF Biosecurity Authority Standard 158.03.06.

. State Departments must advise AQIS Canberra Office of any amendments to their management procedures at the earliest opportunity. Canberra Office will forward amendments to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (minimum annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable MAF Biosecurity Authority Standard 158.03.06.

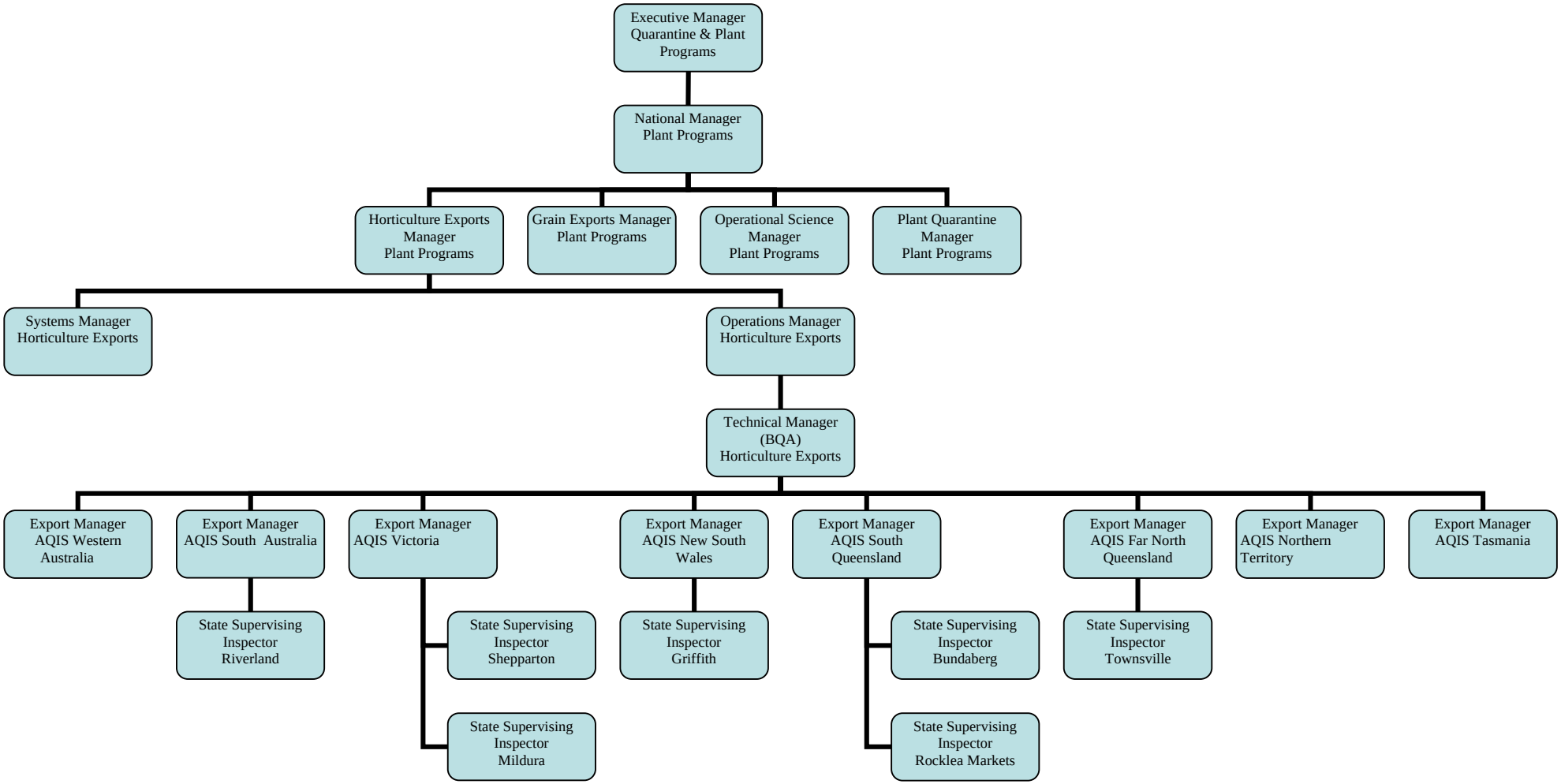
8.4.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

Attachment to Section 8.1 AQIS Plant Contact List



ATTACHMENT 1 - NEW ZEALAND PEST LIST

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under Appendices 2 (Area Freedom) and 5 (cold storage disinfestation) to the NZ BQA.

Growers and packhouse must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

- avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600-unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale

Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Mite	

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	-

Non-regulated non plant pests/organisms

None

BANANA
Musa

Bananas can be exported to New Zealand under Appendix No. 6 – Non Host of the NZ BQA.

Growers and packhouses need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a regulated pest until official categorisation has been determined by AQIS/MAF.

***Maconellicoccus hirsutus* (pink hibiscus mealybug) is listed for bananas, and AQIS can certify freedom from this pest based on the following:**

Maconellicoccus hirsutus

1. In field controls for *Maconellicoccus hirsutus* species are a requirement of grower registration, as such pink hibiscus mealybug will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Maconellicoccus hirsutus* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

3. Pre-export inspection of fruit will identify the presence of *M. hirsutus*, and the fruit would be rejected for export to New Zealand.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Cercospora hayi	diamond spot
Chaetothyrina musarum	sooty blotch
Cladosporium spp.	cladosporium mould
Glomerella cingulata var. *minor (*anamorph *Collectotrichum gloeosporioides* var. *minor)*	anthracnose
*Guignardia musae (*anamorph *Phyllosticta musarum)*	freckle
Phytophthora palmivora	black rot
Ramichloridium musae	freckle
Aleurodicus dispersus	spiralling whitefly
Amblypelta lutescens	fruit spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Araecerus coffeae	coffee bean weevil
Aspidiotus destructor	coconut scale
Atherigona orientalis	muscid fly
Bactrocera bryoniae	**fruit fly** #
Bactrocera musae	**banana fruit fly** #

Bactrocera cucumis	**cucumber fruit fly** #
Bactrocera frauenfeldi	**fruit fly** #
Bactrocera jarvisi	**jarvis' fruit fly** #
Bactrocera neohumeralis	**lesser Queensland fruit fly** #
Bactrocera tryoni	**Queensland fruit fly** #
Ceratitis capitata	**Mediterranean fruit fly** #
Chaetanaphothrips signipennis	banana rust thrips
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Cnaphalocrocis medinalis	rice leaf folder
Dirioxa pornia	Island fruit fly
Dysmicoccus brevipes	pineapple mealybug
Elixothrips brevisetis	banana rind thrips
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Ferrisia virgata	striped mealybug
Geloptera miracula	chyrsomelid beetle
Haplothrips gowdeyi	black flower thrips
Helicoverpa assulta	cape gooseberry budworm
Hemiberlesia palmae	citrus black scale
Icerya aegyptiaca	Eygyptian fluted scale
Icerya seychellarum	Seychelles scale
Isotenes miserana	orange fruit borer
Leptoglossus gonagra	squash bug
Maconellicoccus hirsutus	**pink hibiscus mealybug #**
Melanitis leda ismene	Rice butterfly
Monolepta australis	red-shouldered leaf beetle
Opogona glycyphaga	sugar-cane bud moth
Orgyia australis	vapourer moth
Pentalonia nigronervosa	banana aphid
Pinnaspis strachani	hibiscus snow scale
Planococcus citri	citrus mealy bug
Planococcus minor	passionvine mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rhyparida discopunctulata	leaf beetle
Spodoptera exigua	beet armyworm
Thrips florum	flower thrips
Thrips hawaiiensis	banana flower thrips
Tiracola plagiata	banana fruit caterpillar
Tirathaba rufivena	fruit borer
Unaspis citri	citrus snow scale
Xenothictis sciaphila	tortricid
Brevipalpus lewisi	bunch mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	vegetable spider mite

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Erwinia carotovora	bacterial soft rot
Aspergillus flavus	aspergillus storage rot
Aspergillus niger	aspergillus rot
*Ceratocystis paradoxa (*anamorph *Thielaviopsis paradoxa)*	ceratocystis rot
Colletotrichum musae	anthracnose
Deightoniella torulosa	black tip
Fusarium pallidoroseum	fusarium rot
*Glomerella cingulata (*anamorph *Colletotrichum gloeosporioides)*	anthracnose
Lasiodiplodia theobromae	fruit and stem-end rot
*Magnaporthe grisea (*anamorph *Pyricularia grisea)*	Johnson's spot
Sclerotinia sclerotiorum	cottony rot
Agrotis ipsilon	greasy cutworm
Aonidiella aurantii	California red scale
Aphis gossypii	cotton aphid
Araecerus fasciculatus	coffee bean weevil
Aspidiotus nerii	oleander scale
Chrysodeixis eriosoma	green garden looper
Coccus hesperidum	brown soft scale
Hemiberlesia cyanophylli	cyanophyllum scale
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Hercinothrips bicinctus	banana silvering thrips
Hermetia illucens	black soldier fly
Listroderes difficilis	vegetable weevil
Pseudococcus longispinus	longtail mealybug
Rhopalosiphum maidis	corn leaf aphid
Spodoptera litura	cluster caterpillar
Brevipalpus californicus	bunch mite
Polyphagotarsonemus latus	broad mite
Tetranychus lambi	strawberry spider mite
Tetranychus urticae	twospotted spider mite

# Denotes high impact pest

CAPSICUM
Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendices 4 (dimethoate treatment) and 10 (field control programmes) to the NZ BQA/IHS.**

A number of Risk Group 2 pests are listed for capsicums, and AQIS can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. bryoniae* should it occur.
4. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. If by chance *B. tabaci* were present on harvested capsicum fruit as a hitch-hiker, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
5. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
6. Historical records show that *B. tabaci* has never been detected on capsicum fruit during AQIS pre-export inspection.

Conogethes punctiferalis

1. In field controls for *Lepidopteran* species are a requirement of grower registration, as such

YPM (Yellow Peach Moth) will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Lepidopteran spp* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

Thrips palmi

1. If *T. palmi* were present on harvested capsicum fruit, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on capsicum fruit during AQIS pre-export inspection.

Monilinia fructigena

1. This fungus does not occur in Australia.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
*Bactrocera kraussi**	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly

Homoptera	
Aleyrodidae	
Bemisia tabaci [vect]	
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Fungus

Ascomycota	
Leotiales	
Sclerotiniaceae	
Monilinia fructigena (anamorph *Monilia fructigena*)	European brown rot

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aleyrodidae	
Aleurodicus dispersus	spiralling whitefly
Trialeurodes vaporariorum [strain]	greenhouse whitefly

Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Coccidae	
Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale
Diaspididae	
Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Nectria haematococca var. *brevicona*	dry rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata f. sp. *lycopersici*	-
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *vasinfectum*	fusarium wilt

Pythiales	
Pythiaceae	
Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak

Virus

-	
-	
-	
tobacco leaf curl bigeminivirus [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Weed	
Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf
Xanthium spp. (except *X. spinosum*)	bur
Caryophyllales	
Amaranthaceae	
Amaranthus spp.	amaranthus
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta
- **Coleoptera**
  - **Curculionidae**
    - *Listroderes costirostris* — vegetable weevil
    - *Listroderes obliquus* — vegetable weevil
- **Hemiptera**
  - **Pentatomidae**
    - *Nezara viridula* — green vegetable bug
- **Homoptera**
  - **Aleyrodidae**
    - *Bemisia argentifolii* — poinsettia whitefly
  - **Aphididae**
    - *Aphis craccivora* — cowpea aphid
    - *Aphis gossypii* — cotton aphid
    - *Myzus persicae* — green peach aphid
  - **Coccidae**
    - *Saissetia coffeae* — hemispherical scale
  - **Pseudococcidae**
    - *Pseudococcus longispinus* — longtailed mealybug
- **Lepidoptera**
  - **Noctuidae**
    - *Agrotis ipsilon* — greasy cutworm
    - *Chrysodeixis eriosoma* — green garden looper
    - *Helicoverpa armigera* — tomato fruitworm
    - *Spodoptera litura* — cluster caterpillar
  - **Gelechiidae**
    - *Phthorimaea operculella* — potato tuber moth
  - **Pyralidae**
    - *Sceliodes cordalis* — poroporo fruit borer
- **Orthoptera**
  - **Gryllidae**
    - *Teleogryllus commodus* — black field cricket

Mite

Arachnida
- **Acarina**
  - **Eriophyidae**

Aculops lycopersici — tomato russet mite
  - **Tarsonemidae**
    - *Polyphagotarsonemus latus* — broad mite

  - **Tetranychidae**
    - *Tetranychus ludeni* — bean spider mite

Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Diaporthales
Valsaceae
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli*) — phomopsis stem rot
Dothideales
Mycosphaerellaceae
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*) — black leaf spot
Erysiphales
Erysiphaceae
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*) — powdery mildew
Hypocreales
Hypocreaceae
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*) — fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*) — root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*) — fusarium fruit rot
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana (anamorph *Botrytis cinerea*) — grey mould
Sclerotinia minor — sclerotinia rot
Sclerotinia sclerotiorum — cottony rot
Phyllachorales
Phyllachoraceae
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*) — bitter rot

Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*) — rhizoctonia rot
Stereales
Atheliaceae
Athelia rolfsii (anamorph *Sclerotium rolfsii*) — Rolf's disease

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Lasiodiplodia theobromae — fruit and stem-end rot
Macrophomina phaseolina — ashy stem blight
Phoma destructiva — bulb rot

Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Bacterium	
-	
-	
Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	
A*grobacterium tumefaciens*	crown gall
Weed	
Angiospermae	
Asterales	
Asteraceae	
Galinsoga parviflora	
Sonchus spp.	sowthistle

Poales

Poaceae

Echinochloa spp.	grasses
Eleusine indica	goose grass
Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis, *C. reticulata*, *C. maxima*, *C. paradisi*, *C. limon* and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug

Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth

Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm

Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non-plant pests/organisms

None

CUCUMBER
Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme),**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for cucumbers. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested cucumber fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested cucumber fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspections of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the NZ BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.

2. Cucumbers exported to New Zealand under appendix 4 and 10 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	

Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	
Acrididae	

Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cladosporium cucumerinum	--
Moniliaceae	
Verticillium albo-atrum [severe strain]	progressive wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Virus

-

-
  -
    tobacco ringspot nepovirus [strain] [VO] -
    tomato spotted wilt tospovirus [strain] [VO] -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid

Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	

Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould

Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of Sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Growers and packhouse must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk Group 2 pests *Conogethes punctiferalis*. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest *Maconellicoccus hirsutus*.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug

Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail
Fungus	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	-
Coniella diplodiella	white rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	

Alternaria vitis	leaf disease
Cladosporium viticola	cladosporium leaf spot

Weed
Angiospermae
Asterales
Asteraceae

Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except *X. spinosum*) [contaminant]	bur

Geraniales
Zygophyllaceae

Tribulus terrestris [contaminant]	caltrop

Poales
Poaceae

Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass

Solanales
Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae

Latrodectus hasselti	Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	

Thripidae	
Frankliniella occidentalis	western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips
Mite	
Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Tetranychidae	
Panonychus ulmi	European red mite
Tetranychus urticae	twospotted spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Fungus	
Ascomycota	
Diatrypales	
Diatrypaceae	
Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker
Elsinoaceae	
Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose
Mycosphaerellaceae	
Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	

Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	-
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	-
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	-
Digitaria violascens [contaminant]	-
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass
Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	-
Pennisetum macrourum [contaminant]	African feather grass
Solanales	

Solanaceae

Lycium barbarum [contaminant]	boxthorn
Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

MANGO
Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Bactrocera cucumis	cucumber Fruit Fly
Bactrocera frauenfeldi	fruit Fly
Bactrocera jarvisi	jarvis' fruit fly
Bactrocera musae	banana fruit Fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera opiliae	false Oriental Fruit Fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly
Dirioxa pornia	Island Fruit Fly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	yellow peach moth
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Frankliniella schultzei	flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Helopeltis clavifer	
Icerya aegyptiaca	Egyptian fluted scale
Idioscopus clypealis	mango hopper
Idioscopus nitidulus	mango hopper
Ischnaspis longirostris	black thread scale
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Monolepta australis	red-shouldered leaf beetle

Monolepta divisa	small monolepta beetle
Nipaecoccus vastator	karoo thorn mealybug
Ophiusa tirhaca	
Penicillaria jocosatrix	mango tipborer
Phenacaspis dilatata	mango scale
Planococcus citri	Citrus mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rastrococcus sp.	
Rhyparida limbatipennis	
Saissetia miranda	Mexican black scale
Selenothrips rubrocinctus	redbanded thrips
Sternochetus mangiferae	mango seed weevil
Asterina punctiformis	
Chaetothyrina tenuissima	stem sooty blotch
Cytosphaera mangiferae	stem-end rot
Elsinoe mangiferae (anamorph Sphaceloma mangiferae)	mango scab
Fusicoccum mangiferae	
Nattrassia mangiferae	stem-end rot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangifolia	storage rot
Pestalotiopsis theae	mango blight
Pestalotiopsis virgatula	mango leaf spot
Phomopsis mangiferae	stem end rot
Pythium mangifera (anamorph Oidium mangiferae)	mango powdery mildew
Schizoparme straminea (anamorph Coniella	schizoparme fruit rot

Non-regulated pests

Pest Scientific Name	Common Name
Aonidiella aurantii	California red scale
Ceroplastes destructor	white wax scale
Epiphyas postvittana	light brown apple moth
Helicoverpa armigera	tomato fruitworm
Heliothrips haemorrhoidalis	greenhouse thrips
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Icerya purchasi	cottony cushion scale
Parasaissetia nigra	nigra scale
Pseudococcus longispinus	long tailed mealybug
Saissetia coffeae	helmet scale
Toxoptera aurantii	black citrus aphid
Toxoptera citricida	brown citrus aphid
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite

Alternaria alternata	black stalk rot
Botryosphaeria dothidea (*anamorph Fusicoccum aesculi)*	canker
Botryosphaeria parva (*anamorph Fusicoccum parvum)*	canker
Botryosphaeria rhodina	gummosis
Botryosphaeria ribis (*anamorph Lasiodiplodia theobromae)*	canker
Botryotinia fuckeliana (*anamorph Botrytis cinerea)*	grey mould
Cladosporium cladosporioides	cladosporium leaf spot
Cochliobolus hawaiiensis	leaf spot, seed rot
Colletotrichum acutatum	anthracnose
Colletotrichum coccodes	anthracnose
Dipodascus Geotrichum (*anamorph Geotrichum candidum)*	sour rot
Dothiorella aromatica	stem-end rot
Epicoccum purpurascens	black mould
Erysiphe cichoracearum (*anamorph Oidium asterispunicei)*	powdery mildew
Fusicoccum luteum	bunch rot
Glomerella cingulata (*anamorph Colletotrichum gloeosporioides)*	anthracnose
Glomerella lagenaria (*anamorph Colletotrichum orbiculare)*	
Pestalotiopsis funereal	leaf spot
Pestalotiopsis versicolor	pestalotiopsis rot
Phytophthora nicotianae	buckeye rot
Pithomyces chartarum	facial eczema fungus
Pleospora allii (*anamorph Stemphylium vesicarium)*	black mould
Rhizopus stolonifer	rhizopus soft rot
Thanatephorus cucumeris (*anamorph Rhizoctonia solani)*	rhizoctonia rot

MELON
Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 2 and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Pest Scientific Name	**Common Name**

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug

Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	-
Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	

Pythiales
Pythiaceae
Pythium aphanidermatum cottony leak

Zygomycota: Zygomycetes
Mucorales
Choanephoraceae
Choanephora cucurbitarum blight

Bacterium

-
-
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* bacterial rot

Virus

-
-
-
tobacco ringspot nepovirus [strain] [VO] -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	

Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	

Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata (anamorph *Fusarium lateritium*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight

Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Pseudomonadaceae	
Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

PAPAYA
Papaya

Papaya can be exported to New Zealand under Appendix No. 12 - Irradiation of the NZ BQA.

Growers and packhouse choosing 250 Gray (Gy) irradiation for papaya do not need to be specifically registered for the New Zealand export program.

Growers and packhouse choosing 150 Gy irradiation and in-field controls for papaya need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

***Conogethes punctiferalis* (yellow peach moth) is listed for papaya, and AQIS can certify freedom from this pest based on the following:**

Conogethes punctiferalis

1. If infield controls for *Conogethes punctiferalis* are carried out, fruit will be irradiated at 150Gy prior to export.

2. Where irradiation is chosen as the pest control activity for *Conogethes punctiferalis* a minimum dose of 250Gy must be applied prior to export. This treatment will be considered to be a generic treatment for all regulated arthropod pests listed below.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	**Common Name**
Asperisporium caricae	black spot
Phomopsis caricae-papayae	wet fruit rot
Phytopthora capsici	buckeye rot
Phytopthora palmivora	black rot
Bactrocera cucumis	**cucumber fruit fly** #
Bactrocera frauenfeldi	**fruit Fly** #
Bactrocera jarvisi	**jarvis' fruit fly** #
Bactrocera musae	**banana fruit fly** #
Bactrocera neohumeralis	**lesser Queensland fruit fly** #
Bactrocera tryoni	**Queensland fruit fly** #
Ceratitis capitata	**Mediterranean fruit fly** #
Dirioxa pornia	Island Fruit Fly
Aleurodicus dispersus	spiraling whitefly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale

Aspidiotus destructor	coconut scale
Carpophillis maculatus	dried fruit beetle
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	**yellow peach moth** #
Eucalymnatus tessellatus	tessellated scale
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Ferrisia virgata	striped mealybug
Pericyma cruegeri	poinciana looper
Pseudaulacaspis cockerelli	Cockerell's scale
Papaya ringspot virus (type P strain)	PRSV-Type P

Non-regulated pests

Pest Scientific Name	Common Name
Brevipalpus phoenicis	passion vine mite
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria rhodina (anamorph Lasiodiplodia theobromae)	gummosis
Botryosphaeria ribis	canker
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum dematium	anthracnose
Corynespora cassicola	leaf spot
Erysiphe cruciferarum	powdery mildew
Fusarium pallidoroseum	fruit core rot
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	anthracnose
Leveillula taurica	powdery mildew
Mycosphaerella caricae (anamorph Phoma caricae-papayae)	leaf spot
Phytophthora nicotianae	buckeye rot
Rhizopus stolonifer	rhizopus soft rot
Aphis spiraecola	spirae aphid

Denotes high impact pest

PINEAPPLE
Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	

Diaspis bromeliae	pineapple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla	
Unknown Symphyla	
Symphylidae	
Hanseniella sp.	symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetes	
Dematiaceae	
Thielaviopsis paradoxa	
Moniliaceae	
Penicillium funiculosum	

Bacterium

-

-

Enterobacteriaceae

Erwinia ananas	marbling of fruit

Virus

-	
-	
-	
mealybug wilt closterovirus	-

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae

Iridomyrmex glaber	black house ant
Paratrechina vaga	ant
Tapinoma sp.	ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin’s flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps

Mite

Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite
Nematode	
Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	
Virus	
-	
-	
-	
tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	**Common Name**
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil

Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil

Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips

Mite
Arachnida

Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Myriapod
Diplopode

Julida	
Blaniulidae	
Blaniulua guttulatus	spotted snake millipede

Mollusc
Gastropoda

Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Limacidae	
Deroceras panormitanum	brown field slug
Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and 10 (field control programs)**

Growers and packhouse that are growing/packing tomatoes for export to New Zealand under appendix 4 to the NZ BQA must be registered for this purpose.

A number of Risk Group 2 pests have been listed for tomatoes. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested tomato fruit as a hitch-hiker, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on tomato fruit during AQIS pre-export inspection.

Thrips palmi

1. If *T. palmi* were present on harvested tomato fruit, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on tomato fruit during AQIS pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export application of dimethoate spray to tomatoes (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
4. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. musae* has never been detected on tomato fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm

Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	
Antherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips

Fungus

Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak

Virus

-	
-	
-	
	-
tobacco ringspot nepovirus [strain] [VO]	

tomato spotted wilt tospovirus [strain] [VO] -

Phytoplasma

-
- -
- -

tomato big bud phytoplasma -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar

Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot

Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease

Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot

Non-regulated non plant pests

None

WATERMELON
Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for watermelons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the NZ BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle

Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida
Acarina

Acaridae
Tyrophagus dimidiatus mushroom mite
Tetranychidae
Eutetranychus orientalis pear leaf blister mite
Tetranychus desertorum desert spider mite
Tetranychus lombardinii southern lobed mite
Tetranychus neocaledonicus Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Ascochyta spp. -
Phomopsis cucurbitae --

Oomycota
Pythiales
Pythiaceae
Pythium spp. pythium rot

Bacterium
-
-
Enterobacteriaceae
Erwinia tracheiphila bacterial wilt
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta
Hymenoptera
Formicidae
Solenopsis geminata fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta
Coleoptera
Curculionidae
Asynonychus cervinus Fuller's rose weevil

Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	

Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Pleosporaceae
Leptosphaerulina trifolii — seed rot
Unknown Dothideales
Didymella bryoniae — cucumber stem rot
(anamorph *Phoma cucurbitacearum*)
Erysiphales
Erysiphaceae
Erysiphe cichoracearum — powdery mildew
(anamorph *Oidium asteris-punicei*)
Hypocreales
Hypocreaceae
Nectria haematococca — fusarium fruit rot
(anamorph *Fusarium solani*)
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana — grey mould
(anamorph *Botrytis cinerea*)
Sclerotinia sclerotiorum — cottony rot
Phyllachorales
Phyllachoraceae
Glomerella cingulata — bitter rot
(anamorph *Colletotrichum gloeosporioides*)
Glomerella lagenaria — --
(anamorph *Colletotrichum orbiculare*)
Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae
Thanatephorus cucumeris — rhizoctonia rot
(anamorph *Rhizoctonia solani*)
Stereales
Atheliaceae
Athelia rolfsii — Rolf's disease
(anamorph *Sclerotium rolfsii*)

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales

Sphaerioidaceae
Phoma exigua — phoma rot
Septoria cucurbitacearum — --

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales

Dematiaceae	
Alternaria cucumerina	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot

Oomycota

Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew

Bacterium

-

-	
Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI
Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for zucchinis and scallopinis. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested zucchini fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on zucchini fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to zucchini and scallopini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 11(winter window) to the NZ BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Zucchinis exported to New Zealand under Appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Aphis gossypii [vect.]	cotton aphid
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Bactrocera cucumis	**cucumber fruit fly #**
Bemisia tabaci	**sweet potato whitefly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite

Tetranychus kanzawai	**kanzawa mite #**
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite

Tomato big bud phytoplasma

Tobacco ringspot nepovirus [strain] [VO]

Non-regulated pests

Pest Scientific Name	**Common Name**
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	whitefringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph	cucumber stem rot
Phoma cucurbitacearum)	
*Dipodascus geotrichum (*anamorph	sour rot
Geotrichum candidum)	
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot

*Erysiphe cichoracearum (*anamorph *Oidium asteris-punicei)*	powdery mildew
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	fusarium rot
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	fusarium storage rot
*Gibberella acuminata (*anamorph *Fusarium acuminatum)*	fusarium stem canker
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium rot
*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	mould
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	root and stem dry rot
*Gibberella intricans (*anamorph *Fusarium equiseti)*	mould
*Gibberella zeae (*anamorph *Fusarium graminearum)*	fruit and stem-end rot
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	ashy stem blight
Lasiodiplodia theobromae	pink rot
Macrophomina phaseolina	angular leaf spot
Phytophthora cryptogea	downy mildew
Phytophthora drechsleri	pythium root and stem rot
Pseudomonas syringae pv. *lachrymans*	leak
Pseudoperonospora cubensis	bacterial wilt
Pythium irregulare	wet rot
Pythium oligandrum	sclerotinia rot
Pythium ultimum	cottony rot
Ralstonia solanacearum	rhizoctonia rot
Rhizopus arrhizus	pink rot
Sclerotinia minor	verticillium wilt
Sclerotinia sclerotiorum	bacterial leaf spot
Septoria cucurbitacearum	
*Thanatephorus cucumeris (*anamorph *Rhizoctonia solani)*	
Trichothecium roseum	
Verticillium dahliae	
Xanthomonas campestris pv. cucurbitae	

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

 # Denotes high impact pest

ATTACHMENT 2 FORMS

2.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional AQIS office**			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
EMAIL ADDRESS			
POSTAL OR BUSINESS ADDRESS			
	POST CODE		
PROPERTY ADDRESS			
	POST CODE		
REAL PROPERTY DESCRIPTION (of area under planting)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual – Amendment 6 – August 2006 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	Pumpkin
Strawberries	Rockmelon	Honeydew melon	Cucumber
Scaloppini			

2.2 APPLICATION FOR PACKHOUSE REGISTRATION

APPLICATION FOR PACKER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional AQIS office**			
NAME OF PACKER			
AQIS EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
	POST CODE		
PREMISES ADDRESS			
	POST CODE		

DECLARATION

I/We, ... hereby apply for registration as a packer of .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual –Amendment 6 – August 2006 and agree to be bound by the conditions and restrictions contained therein as they apply to packers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	Pumpkin
Strawberries	Rockmelon	Honeydew melon	Cucumber
Scaloppini			

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION

APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW **Please post or fax this form to your local regional AQIS office**			
NAME OF TREATMENT CENTRE			
AQIS EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
		POST CODE	
PREMISES ADDRESS			
		POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a treatment centre as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual –Amendment 6 – August 2006 and agree to be bound by the conditions and restrictions contained therein as they apply to treatment centres.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

Treatment Type (please specify)

Methyl Bromide Fumigation	Dimethoate
Cold Storage	Irradiation

2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the NZ BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....
I/We have copies of the NZ BQA Systems Operation Manual – Amendment 6 – July 2006 and have the ability to recognise and identify the regulated pest and weed seeds of concern to New Zealand.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to NZ BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any NZ BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the NZ BQA and the instructions contained in the Systems Operation Manual for NZ BQA.

Signature .....
Printed Name ..... Date .....

Approved ..... Export Manager
Date ..... Seal/Stamp .....

2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

Page 1 of 2

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Amendment 6 – July 2006 of the Australian - New Zealand Bilateral Quarantine Arrangement and the NZ BQA Systems Operation Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the NZ BQA and the Systems Operation Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for NZ BQA commodities will provide properly identified inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection
The following persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Page 2 of 2

Treatment Loading Supervision Authority

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the NZ BQA for and on behalf of this Company.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of NZ BQA commodities as is required by the NZ BQA and the contents of this Manual.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the NZ BQA and the Systems Operation Manual Amendment 6 – July 2006 required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

2.6 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Tick

Date	Trade Description .....
Commodity	Commodity .....
No of Cartons	Registered Grower No. .....
Registered Grower No.	Registered Packing Establishment .....
	.....
Ex 28/RFP Number/s:	Australian Origin .....
.....……	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250
Exporter/s	(Tick one) .....
	Exporter Inspection completed by:.....
	(a) Exporter
Inspector Name	(b) ED (name)
(Block Letters)	**Inspected by**:
.....	Grower Line .....
Inspector's Signature	Consignment Line .....

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NR**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed ☐ **Failed** ☐ **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Regulated Pest
****Please note, this is a template only: packhouse/ exporters are permitted to formulate their own copies of this template, provided all of the above information is contained. This form will be checked and approved at audit**

2.7 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	**Number of Cartons/Commodity**	**Temperatures Taken ***

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

2.8 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKHOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0C$.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

2.9 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand should I/we wish to re-enter the Arrangement protocol at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in block letters	Signature	Date
.....	.....	.....

Voluntary Withdrawal

I/we agree my/our property is no longer required to be registered under the terms and conditions required for the New Zealand export trade for NZ BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand should I/we wish to re-enter the Arrangement at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in Block letters	Signature	Date
.....	.....	.....

AQIS OFFICE DOCUMENTATION
Fax to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or
Inspector's Signature

.....

2.10 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection/audit of the following property/premises:- (Grower – Packer – ED – Treatment Centre – Exporter – Freight Forwarder – Other ……) (select appropriate title)

Name .....
Address .....
.....
.....
Reg No .....

I believe for the following reasons that the entity outlined above no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) they (please indicate):

have no intention to correct the above mentioned deficiency in the immediate future

OR

are suspended until corrective action has been implemented and successful re-audit has been undertaken

I hereby declare the entity outlined above is suspended from Appendix …….. (all, 4, 10 etc) of the Australia - New Zealand NZ BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Representative Name	Representative Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

2.11 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY CAPSICUM/TOMATO CONSIGNMENTS TO BRISBANE FROM TOWNSVILLE, BUNDABERG OR CAIRNS

I, ...of .....……

.....……..

hereby declare that the ..... cartons of ……..tomatoes/capsicums (circle as applicable) consigned to..... .....……...on ..... (date) were harvested from the following registered

blocks……..

…… AND

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute (tomatoes only).

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

3. further declare ..... (insert name of supervisor) a designated person nominated by..... (insert name of exporter) has supervised the loading of this consignment for transport to .....….....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....20.....

Signature ..... Witness .....

2.12 CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28/RFP Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

2.13 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

2.14 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

<table>
<tr><td rowspan="4">Grower name and address:</td><td>Cucurbit type (please tick ✓)
Cucumber ☐
Honeydew melon ☐
Rockmelon ☐
Scallopini ☐
Watermelon ☐
Zucchini ☐</td><td>Treatment (please tick ✓)
Appendix 3 & 10 ☐
(methyl bromide)
Appendix 4 & 10 ☐
(dimethoate dip)
Appendix 10 & 11 ☐
(winter window)</td></tr>
<tr><td colspan="2">Declaration</td></tr>
<tr><td>Grower number:</td><td colspan="2" rowspan="3">I,……hereby declare the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.

……. ……/……/……
Signature Date</td></tr>
<tr><td>Consignee name and address:</td></tr>
<tr><td></td></tr>
</table>

Production block number	Package type (carton, bin etc)	Number of packages	Total mass

Australia – New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual 6a

This systems operation manual incorporates the New Zealand import health standards for Australian fruit fly host material and the Australian Quarantine and Inspection Service's operational requirements.

This manual is maintained and controlled by the AQIS Plant Programs Section in Canberra

Systems Operation Manual (SOM)

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES 5
AMENDMENT RECORD 8
GLOSSARY OF TERMS 9
DEFINITIONS 10
INTRODUCTION 11
Scope of the Manual 11
SECTION 1 11
1.1 Pest categories 11
1.1.1 Risk Group 3 (RG3) Pests 11
1.1.2 Risk Group 2 (RG2) Pests 12
1.1.3 Risk Group 1 (RG1) Pests 12
1.1.4 Non Regulated Pests 12
1.1.5 Regulated Pests 12
1.2 Maximum pest levels 12
Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS 13
1.3 Contaminates 13
SECTION 2 TREATMENT APPENDICES 14
2.1 Summary 14
Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES 15
2.2 Appendix 1 – Country freedom from fruit fly 26
2.3 Appendix 2 – Area freedom districts within Australia 26
2.3.1 General requirements 26
2.3.2 Approved area freedom districts 27
2.4 Appendix 3 – Fumigation 28
2.5 Appendix 4 – Dimethoate 28
2.6 Appendix 5 – Cold treatment 29
2.7 Appendix 6 – Non host 29
2.8 Appendix 7 – Heat treatments 29
2.9 Appendix 8 – Not currently in use 29
2.10 Appendix 9 – Not currently in use 29
2.11 Appendix 10 – Field control programs 29
2.12 Appendix 11 – Winter window 30
2.13 Appendix 12 – Irradiation 30
SECTION 3 GROWER RESPONSIBILITIES 31
3.1 Summary 31
3.2 General requirements 32
3.3 Registration 32
3.4 Orchard responsibilities 32
3.4.1 Citrus growers 33
3.4.2 Avocado growers 33
3.5 Audits 33
3.5.1 Non Compliance 34
3.5.2 Packhouse Approved Arrangement systems 34
3.5.3 Security and supervision 35

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment 35
SECTION 4 CROP MONITOR RESPONSIBILITIES 36
4.1 Registration 36
4.2 Audit 36
4.3 Non Compliance 36
SECTION 5 PACKHOUSE RESPONSIBILITIES 37
5.1 General requirements 37
5.2 Documentation 37
5.3 Delegation of exporter responsibilities 37
5.3.1 General 37
5.3.2 Security and supervision 38
5.3.3 Inspection 38
5.4 Audit 38
5.4.1 Non Compliance 38
5.5 Approved Arrangements – Packhouse 39
5.5.1 General requirements 39
5.5.2 Audit 39
5.5.3 Inspection requirements 40
Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS 40
5.5.4 Documentation 41
5.5.5 Post treatment security 41
SECTION 6 TREATMENT CENTRE RESPONSIBILITIES 43
6.1 General requirements 43
6.2 Registration 43
6.3 Audit 43
6.3.1 Non Compliance 43
6.4 Post treatment security 43
6.4.1 Registration 43
6.4.2 General requirements 44
6.5 Post treatment transportation 44
6.6 Treatment Appendices 45
6.6.1 Appendix 3 – Fumigation 45
Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES 45
6.6.2 Appendix 4 – Dimethoate 46
Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES 46
6.6.3 Appendix 5 – Cold treatment 48
Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS 48
6.6.4 Appendix 12 – Irradiation 49
6.7 Tablegrape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti* 51
6.7.1 General requirements 51
6.7.2 Treatment 51
6.7.3 Traceability 51
6.7.4 Additional precautionary measures 51
SECTION 7 EXPORTER RESPONSIBILITIES 52
7.1 General requirements 52
7.2 Exporter Inspection 52
7.2.1 Split Consignment Inspections 53
7.3 Documentation 53
7.4 Rejected Produce 54

7.5 Security of Produce 54
7.6 Audit 54
7.6.1 Non-compliance 55
SECTION 8 GOVERNMENT RESPONSIBILITIES 56
8.1 AQIS Canberra office 56
8.1.1 Manager - Plant Programs 56
8.2 AQIS State Offices 56
8.2.1 Registration requirements 57
8.2.2 Sampling requirements 57
8.2.3 AQIS inspection procedures 57
8.2.4 Consignment line samples 58
8.2.5 Rejection procedures 58
8.3 Audit 59
8.3.1 Audits after Product Rejections by AQIS 59
8.4 Fruit Fly Area Freedom – State Departments 61
8.4.1 Validation of Area Freedom 61
8.4.2 Trapping 62
Attachment to Section 8.1 AQIS Plant Contact List 63
ATTACHMENT 1 - NEW ZEALAND PEST LIST 64
AVOCADO 64
BANANA 69
CAPSICUM 72
CITRUS 81
CUCUMBER 87
GRAPE 95
MANGO 103
MELON 106
PAPAYA 114
PINEAPPLE 116
STRAWBERRY 120
TOMATO 123
WATERMELON 129
ZUCCHINI & SCALLOPINI 136
ATTACHMENT 2 FORMS 140
2.1 APPLICATION FOR GROWER REGISTRATION 140
2.2 APPLICATION FOR PACKHOUSE REGISTRATION 141
2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION 142
2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 143
2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT 144
2.6 INSPECTION RECORD 146
2.7 FUMIGATION RECORD 147
2.8 COLD DISINFESTATION RECORD 149
2.9 WITHDRAWAL NOTICE 150
2.10 SUSPENSION NOTICE 151
2.11 DECLARATION OF DIMETHOATE TREATMENT 152
2.12 CONTAINER REPORT SHEET 153
2.13 AVOCADO GROWER DECLARATION 154
2.14 CUCURBIT GROWER DECLARATION 155

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AMENDMENT RECORD

Amendments to this manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

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GLOSSARY OF TERMS

ANVAS	Avocado Nursery Voluntary Accreditation Scheme
AA	Approved Arrangement
AQIS	Australian Quarantine and Inspection Service
DAFF	Australian Government Department of Agriculture, Fisheries and Forestry
Dmin	The localized minimum absorbed dose within the process load
Dmax	The localized maximum absorbed dose within the process load
EXDOC	Electronic Export Documentation
EX28	Notice of Intention to Export/Export Permit
EX161	Inspection advice notice
EX186	Transfer Certificate
EX222	Approved Arrangement equivalent of EX28
ED	Exporter Delegate
Gray (Gy)	Unit of absorbed dose where 1 Gy is equivalent to the absorption of 1 joule per kilogram
IHS	Import Health Standards (New Zealand)
MAF	Ministry of Agriculture and Forestry (New Zealand)
MeV	Mega Electron Volt
MAP	Maximum Allowable Prevalence
NZ BQA	Australia-New Zealand Bilateral Quarantine Arrangement
PHYTO	Export conditions database.
RFP	Electronic Request for Permit

DEFINITIONS

AQIS Inspection	An inspection of any number of packages from one exporter from the same treatment pathway presented for inspection at one time.
Consignment line inspection	Inspection consists of commodities from a common treatment pathway. The inspection lot can be made up of different growers provided grower line inspections have been undertaken.
Grower line inspection	Inspection that must be performed prior to AQIS inspection and consists of one grower, on commodity and one treatment pathway.
Phytosanitary certificate	A certificate issued in accordance with Article V of the International Plant Protection Convention or at the request of a foreign country authority.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a hand).

INTRODUCTION

The New Zealand Bilateral Quarantine Arrangement (NZ BQA) is a formal agreement between the Australian Government Department of Agriculture Fisheries & Forestry and the New Zealand Ministry of Agriculture and Forestry (MAF), to ensure New Zealand's pre-export requirements are documented. This manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The NZ BQA details a series of treatment appendices that describe the requirements for a particular treatment for fruit fly host material. The structure incorporates developments in relation to the documentation of New Zealand Import Health Standards (IHS) on a commodity-by-commodity basis.

Scope of the Manual

This Systems Operation Manual (SOM) is designed to ensure;

- Only approved fruit fly host commodities are exported to New Zealand;
- Homogeneity of fruit fly host commodity consignments;
- Approved treatments for fruit fly host produce are used;
- Required levels and intensity of inspection of fruit fly host produce are maintained;
- Post treatment security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce;
- Trace back to grower/packer/treatment centre (as appropriate); and
- Accurate phytosanitary certification in accordance with New Zealand requirements

AQIS State Offices and State Departments of Agriculture (or equivalents) are to conduct management audits of the systems to ensure state responsibilities are being adequately performed and recorded.

This SOM gives instructions for audit procedures and maintenance of records that will be the responsibility of AQIS State Offices, and where applicable State Departments of Agriculture or their equivalents.

SECTION 1

1.1 Pest categories

MAF have commenced the re categorisation of pests as regulated and non-regulated pests. Certain regulated pests are deemed by MAF to be high impact pests which is divided into high impact fruit flies and high impact non fruit fly. High impact fruit fly categorisation is equivalent to the previous RG3 and high impact non fruit fly equivalent to RG2 pest categories.

As MAF review current IHS's the existing risk categories of RG1, RG2 and RG3 will be transcribed into the new categories. At this point in time only the mango, papaya, zucchini and banana pest lists reflect this new terminology.

1.1.1 Risk Group 3 (RG3) Pests

Are pests which upon entry into New Zealand would cause major market access disruption for a wide range of New Zealand commodities and/or have significant effects on environment or agricultural production. This group includes species of economically significant fruit flies.

These pests require treatment to be undertaken in Australia with documented procedures to ensure AQIS phytosanitary certification is accurate and auditable by MAF.

If this level pest is detected in New Zealand then the consignment will be re-exported or destroyed and the treatment pathway suspended until such time as an AQIS audit is conducted, and any associated corrective action is undertaken and results accepted by MAF.

1.1.2 Risk Group 2 (RG2) Pests

Are pests which upon entry into New Zealand could cause major market access disruption and/or have significant effects on environment or the agricultural production of a particular commodity.

These pests require some form of management practices to be undertaken (i.e. infield controls, area freedom, or post harvest treatments). An additional declaration to this effect must be made on the phytosanitary certificate.

If this level pest is detected in New Zealand the consignment will be re-exported, destroyed or where appropriate ordered for appropriate treatment. There will be no suspension of trade but a follow up AQIS audit will be conducted to determine cause of the system failure and associated corrective actions undertaken. AQIS may suspend specific commodity pathway until cause of failure is determined and corrective action undertaken.

1.1.3 Risk Group 1 (RG1) Pests

RG1 pests are those pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

These pests require no specific formal treatment or controls, AQIS will inspect for these pests at export inspection, if detected the consignment must be subjected to appropriate treatment/re-conditioning and represented for exporter/exporter delegate (ED) AQIS inspection.

If this level of pest is detected in New Zealand the consignment would be available to be re-conditioned, subject to appropriate treatment (if available), re-export or destroyed.

1.1.4 Non Regulated Pests

These pests have an unlimited tolerance during inspection and are regarded as non-actionable pests between Australia and New Zealand. It should be noted that excessive levels of non-regulated pests may interfere with AQIS inspection and may result in longer inspection times to ensure accurate identification.

1.1.5 Regulated Pests

Regulated pests are regarded as actionable pests between Australia and New Zealand. Actions would be undertaken if they were intercepted/detected. As well as quarantine pests, these include new organisms as defined by the New Zealand *Hazardous Substances and New Organisms Act 1996*, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants.

1.2 Maximum pest levels

Table 1 details inspection levels and tolerances that will ensure that a 95% confidence level that Maximum Allowable Prevalence (MAP) will not be exceeded.

The sample size must be selected/nominated by the exporter or exporter delegate prior to commencement of inspection and cannot be varied. This sample size must be maintained in all subsequent inspections, including AQIS export inspection.

Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weed seeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 - 2000	520	0	≤ 7	0
2001 - 3000	550	0	≤ 7	0
3001 - 4000	560	0	≤ 7	0
4001 - 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

1.3 Contaminates

Consignments contaminated with soil, or other potential carriers of quarantine pests (eg leaf litter) must not exceed tolerances listed below. The consignment may be reconditioned to remove the infestation. After reconditioning, the consignment must be re-inspected and may be exported if found free from infestation.

Consignment lines contaminated with soil in excess of 25g per 600 units shall be washed free of soil prior to release, re-shipped, or destroyed at the importers options and expense.

Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped, or destroyed at the importers option or expense.

SECTION 2 TREATMENT APPENDICES

2.1 Summary

The NZ BQA is divided into separate treatment pathways, called treatment appendices.

The appendices form the framework for the treatment of commodities for the species of economically significant fruit flies (RG3 pests).

The treatment appendices are treated as separate distinct pathways and as such commodities exported under the same treatment pathways may be inspected together at AQIS inspection. Commodities from separate treatment pathways may not be combined for inspection.

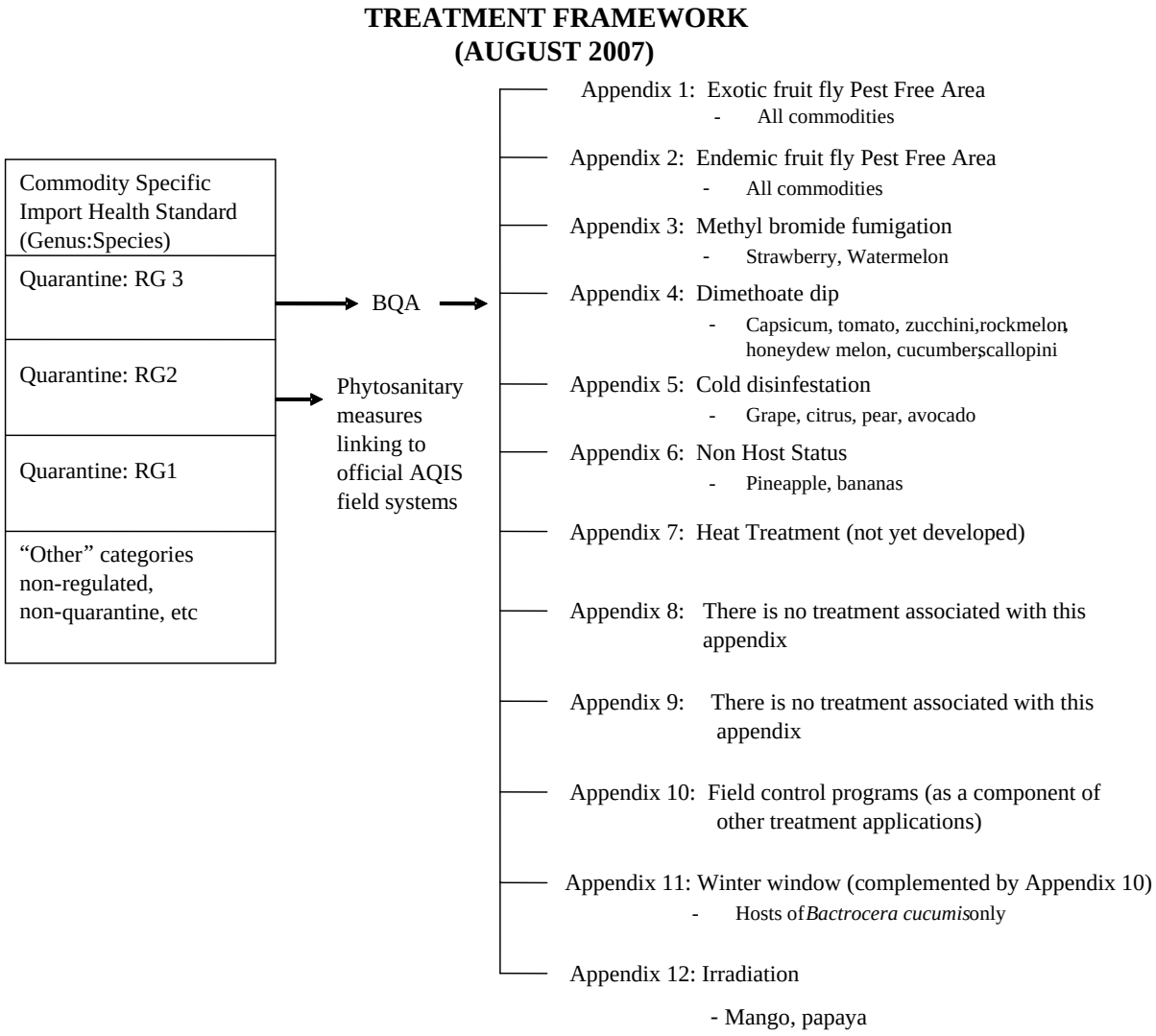


Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Avocado *Persea americana*	Area freedom	✓	✓		✓	"The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia" "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid" **EXDOC ENDORSEMENT # 1641** **OR** The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sunblotch viroid, The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 1582**
Avocado	Cold storage 1°C (±0.2°C) for 16 days	✓	✓	✓	✓	"The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia" "The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The avocadoes in this consignment have undergone appropriate pest control activities that are effective against Pseudocercospora purpurea and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sun blotch viroid" **EXDOC ENDORSEMENT # 1649** **OR** The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from Pseudocercospora purpurea and have been sourced from an approved orchard which has been inspected and found free from symptoms of avocado sunblotch viroid, The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 1585**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Banana *Musa spp.*	Non-host status	✓	✓		✓	"The bananas have been visually inspected in accordance with appropriate official procedures and found to be free from any regulated pests." "The bananas have undergone appropriate pest control activities that are effective agains Maconellicoccus hirsutus" "The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significane in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS - **OR** The bananas have been visually inspected in accordance with appropriate official procedures and found to be free from any regulated pests." "The bananas have been sourced from an area free (verified by an official detection survey) from Maconellicoccus hirsutus" "The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significane in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS
Capsicum *Capsicum annuum*	Area freedom		✓		✓	"The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" " The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1637**
Capsicum*	Dimethoate (spray only) 400ppm and fruit must be sprayed for a minimum of one minute	✓	✓	✓	✓	"The capsicums in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" "The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The capsicums in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF". **EXDOC ENDORSEMENT # 1642** If required "The Capsicums in this consignment have been Fumigated with methyl bromide at the rate of 32gm per cubic metre for 2 hours at 21°C at a maximum of 50% chamber capacity"

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Citrus	Area Freedom	QLD	✓		✓	"The citrus in this consignment has been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The citrus in this consignment has undergone appropriate pest control activities that are effective against *Guignardia citricarpa* and *Xanthomonas axonopodis pv citri*" **EXDOC ENDORSEMENT # 1638** **OR** - The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, - The citrus in this consignment have undergone appropriate pest control activities that are effective against *Guignardia citricarpa*, - The citrus in this consignment have been sourced from an area free (verified by an official detection survey) from *Xanthomonas axonopodis pv citri*, - The citrus in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 3211**
Citrus	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	QLD	QLD	✓	✓	"The citrus in this consignment has been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" "The citrus in this consignment has been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" "The citrus in this consignment has undergone appropriate pest control activities that are effective against Guignardia citricarpa and Xanthomonas axonopodis pv citri" **EXDOC ENDORSEMENT # 1648** **OR** - The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, - The citrus in this consignment have undergone appropriate pest control activities that are effective against *Guignardia citricarpa*, - The citrus in this consignment have been sourced from an area free (verified by an official detection survey) from *Xanthomonas axonopodis pv citri*, - The citrus in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 3212**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	- ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Cucumber *Cucumis sativus*	Area Freedom		✓		✓	- "The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1639**
Cucumber*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	- "The cucumbers in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1643**
Cucumber	Winter window	✓	✓		✓	- The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, - The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, - The cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **EXDOC ENDORSEMENT # 1627**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Grapes *Vitis vinifera*	Area freedom	✓	✓		✓	- The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, - The grapes in this consignment have been treated in accordance with Appendix 2 (Area freedom) of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, -The grapes in this consignment have been treated for *Lactrodectus hasselti* (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, - The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis*, - The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccis hirsutus.* **EXDOC ENDORSEMENT # 1574**
Grapes	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	✓		✓	✓	- The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to the free from any visually detectable quarantine pests, specified by the New Zeland Ministry of Agriculture and Forestry - The grapes in this consignment have been treated in accordance with Appendix 5 (cold storage) of the Arrangement between New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia - The grapes in this consignment have been treated for *Latrodectus hasselti* (Red back spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes - The grapes in this consignment have undergone appropriate pest control activity that is effective against Conogethes punctiferalis - The grapes in this consignment have been sourced from an area free (verified by official detection survey) from *Maconellicoccis hirsutus* - **EXDOC ENDORSEMENT # 1577**
Honeydew *Cucumis melo*	Area freedom		✓		✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1640**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Honeydew*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1644**
Honeydew* (1 May – 30 Sep)	Winter Window	✓	✓		✓	- "The honeydew melons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1628**
Mango *Mangifera indica*	Irradiation			✓	✓	- The mangoes in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT # 3287**
Papaya *Carica papaya*	Irradiation 250 Gy			✓	✓	- The papaya in this consignment have undergone appropriate pest control activities that are effective against Conogethes punctiferalis - The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT # 3425**
Papaya	In-field controls Irradiation 150 Gy	✓	✓	✓	✓	- The papaya in this consignment have undergone appropriate pest control activities that are effective against Conogethes punctiferalis - The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Agreement between New Zealand MAF and Australian Quarantine Inspection Service. - **EXDOC ENDORSEMENT # 3425**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Pears *Pyrus communis*	Area Freedom		✓		✓	- "The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1575**
Pears	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days			✓	✓	- "The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia" - "The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1578**
Pineapple *Ananas comosus* (smooth cayenne only)	Non-host status				✓	- "The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1579**
Pumpkin *Cucurbita pepo &* *cucurbita moschata*	Area freedom		✓		✓	- "The pumpkins in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The pumpkins in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1918**
Rockmelon *Cucumis melo*	Area freedom		✓		✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 pests specified by NZ MAF" **EXDOC ENDORSEMENT # 1631**
Rockmelon* (1 May – 30 Sep)	Winter Window	✓	✓		✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1630**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Rockmelon	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute			✓	✓	- "The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" **EXDOC ENDORSEMENT # 1646**
Scallopini *Cucurbita maxima & cucurbita pepo*	Area freedom		✓		✓	- "The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1632**
Scallopini*	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	- "The scallopinis in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests specified by the New Zealand Ministry of Agriculture and Forestry" - " The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1633**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Scallopini	Winter window					- "The Scallopini in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The Scallopini in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The Scaloppini in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF"
Strawberry *Fragaria spp*	Area freedom		✓		✓	- "The strawberries in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1573**
Strawberry	Methyl bromide 48g/m^3 for 3 hours at a temperature of at least 15°C			✓	✓	- "The strawberries in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1576**
Tomato *Lycopersicon csculentum*	Area freedom		✓		✓	- "The tomatoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1634**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Watermelon *Citrullus lanatus*	Area Freedom		✓		✓	- "The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - **EXDOC ENDORSEMENT # 1626**
Watermelon	Methyl bromide 32g/m^3 for 4 hours at a temperature of 21°C to 26°C	✓	✓	✓	✓	- "The watermelons in this consignment have been treated in accordance with Appendix 3 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1626**
Watermelon (1 May – 30 Sep)	Winter Window	✓	✓		✓	- "The watermelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The watermelons in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1629**
Zucchini *Cucurbita pepo*	Area freedom		✓		✓	- "The zucchinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 1636**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	- ADDITIONAL DECLARATIONS				
		GR	PR	TR	ER	
Zucchini	Winter Window	✓	✓		✓	- "The Zucchinis in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia" - "The Zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry" - "The Zucchinis in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF" - **EXDOC ENDORSEMENT # 3339**

❖ **GR- Grower registration PR – Packhouse registration TR – Treatment registration ER- Export registration**

2.2 Appendix 1 – Country freedom from fruit fly

MAF recognise Australia is free of several species of fruit fly of economic significance to New Zealand (based on MAF Biosecurity Authority Standard 128.03.07).

Australia's freedom status for these flies is maintained through quarantine restrictions and a national monitoring program. The monitoring program is managed by the Office of the Chief Plant Protection Officer (OCPPO) and consists of exotic fruit fly trapping and monitoring regimes conducted at international airports and seaports.

2.3 Appendix 2 – Area freedom districts within Australia

2.3.1 General requirements

Appendix 2 refers to economic species of fruit flies which are endemic to Australia for which, through trapping and monitoring regimes, area freedom for specific species of fly have been established. The areas listed below have been audited and accepted by MAF as complying with MAF Biosecurity Authority Standard 158.03.06.

Area freedom will be assumed, unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. One or more larvae or pupae are found in locally grown fruit; or
. Two male fruit flies are trapped within 400 metres of each other, within a 14-day period; or
. A single female fly is trapped.

In this case, "Area Freedom" will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of MAF Biosecurity Authority Standard 158.03.06, the suspension period will be reduced to;

. one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site;

. Should 2 outbreak sites occur within 1 – 3 km of each other a 30km outbreak zone will be applied, the zone will be centred on a point mid-distance between two outbreaks.

State Departments of Agriculture (or equivalent) must report all fruit fly finds in the recognised zones to the AQIS Canberra office within 48 hours of detection and identification. This information will then be supplied to MAF at the earliest opportunity.

2.3.2 Approved area freedom districts

Districts approved by MAF are listed below.

Riverina – MIA

This area covers the horticulture growing districts along the Murrumbidgee River (as well as the township of Hillston on the Lachlan River), and includes (but is not excluded to) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrandera and Darlington Point and towns located between;

Area (b) is the Hillston District.

Area (c) is the Menindee District.

Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and areas between.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and areas between.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and areas between.

Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri,Barmera, Waikerie and areas between.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, the Shire of Mildura and areas between.

Area (i) the Mypolonga Township surrounds.

Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

The Ord River Irrigation Area – Western Australia

This area covers the Ord River Irrigation Area (ORIA) as outlined below. This is for Mediterranean fruit fly area freedom only.

Area (j) Ord River Irrigation Area (Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the townsite of Kununurra and north-west of the Ord River).

The Shepparton Irrigation Region (SIR)

Area (k) Production areas and townships of Cobram, Koonoomoo, Invergordon, Numurkah, Katandra West, Katamatite, Wunghnu, Tallygaroopna, Congupna,Merrigum, Kyabram, Lancaster, Girgarre, Stanhope, Tongala, Shepparton, Ardmona, Coomboona, Undera, Mooroopna, Arcadia, Kialla, Murchison, Toolamba, Tatura, Dhurringile, Yarroweyah, Strathmerton, Katunga, Echuca, Colbinabbin, Corop, Rochester, Lockington, Rushworth, Wyuna, Bunbartha, Barmah, Picola, Nathalia, Waaia, and Bearii and seasonal tomato production areas.

NOTE: **Should any stages of Risk Group 3 fruit fly (alive or dead) be found during AQIS or Industry inspections in Australia, AQIS will inform the relevant State Department of Agriculture of the detection. AQIS will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.**
Should any stages of Risk Group 3 fruit fly (either alive or dead) be found during MAF import inspections, area freedom certification will be suspended for all districts of Australia until an AQIS audit determines the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on results of the AQIS audit.

Should any stages of a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

2.4 Appendix 3 – Fumigation

This treatment pathway allows the export of watermelons and strawberries to New Zealand. Fruit must be subjected to Methyl Bromide fumigation.

Watermelons exported under this pathway must also comply with Appendix 10 which covers field control programs of fruit flies. Therefore strawberries and watermelons may not be combined for inspection.

2.5 Appendix 4 – Dimethoate

This treatment pathway allows the export of tomatoes, capsicums, zucchinis, rockmelons, honeydew melons, cucumbers, and scallopini to New Zealand. Fruit must undergo mandatory dimethoate

treatment. For some commodities this appendix must be used in conjunction with Appendix 10 (field control programs).

2.6 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand.

2.7 Appendix 6 – Non host

This pathway deals with commodities which have been accepted by MAF as non-host of endemic Australian fruit flies. Pineapples of the **smooth cayenne variety** and bananas can be exported under this pathway.

Pineapples have been historically accepted as non-hosts to the fruit fly species of economic significance present in Australia.

Bananas are accepted as being non-hosts to the fruit fly species of economic significance present in Australia when in the unripe stage of maturity.

Bananas must be harvested, packed and exported in the unripe (i.e. mature green) stage to New Zealand. Consignments containing bananas at the colour break to full ripe stage will be rejected for export to New Zealand.

2.8 Appendix 7 – Heat treatments

At this time there are no commodities permitted for export under this pathway.

2.9 Appendix 8 – Not currently in use

2.10 Appendix 9 – Not currently in use

2.11 Appendix 10 – Field control programs

The field control programs referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies.**

This appendix is intended to be used in combination with other appendices rather than as a stand alone treatment. For example, cucumber exports to New Zealand under the dimethoate dip treatment require both a post-harvest dip and pre-harvest field control program – a combination of both Appendix 4 and Appendix 10.

Treatment	Commodity
Appendix 3 - Methyl bromide fumigation	watermelon
Appendix 4 – Dimethoate	capsicum, scallopini, cumber honeydew melon, tomato
Appendix 11 – Winter window	rockmelon, honeydew melon, cucumber, watermelon

2.12 Appendix 11 – Winter window

A "winter window" access period has been negotiated between MAF and AQIS, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly). "Winter window" specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment. The access period is between **1 May and 31 August in any year** (arriving in New Zealand).

Rockmelons, scallopini, honeydew melons, zucchini and **cucumbers** can be exported under this appendix from areas recognised free from Mediterranean fruit fly. Currently areas recognised free of Mediterranean fruit fly are the Ord River Irrigation Area and the states of Queensland, New South Wales, Victoria, the Northern Territory, and Tasmania.

As cucumber fruit fly is the only RG3 pest listed for **watermelons,** this commodity can be exported under this appendix from all areas in Australia.

2.13 Appendix 12 – Irradiation

Mangoes and papaya may be exported under this treatment pathway.

A treatment rate of min 250Gy has been prescribed for mangoes and an option of either 250Gy or 150Gy for papaya. The 250Gy treatment for either commodity has been accepted by MAF as effective against arthropod pests.

The 150Gy treatment for papaya is accepted by MAF as an effective treatment for fruit fly pests. If this rate is chosen then effective management practices must be undertaken for *Conogethes punctiferalis* (yellow peach moth).

SECTION 3 GROWER RESPONSIBILITIES

3.1 Summary

Treatment Pathway	Commodity	Requirement
Appendix 2 Area Freedom	Avocadoes	Growers must register with AQIS to maintain field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Capsicum	Growers must register with AQIS for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Grapes	Growers must register with AQIS to maintain field controls for the RG 2 pest *Conogethes punctiferales*. AQIS will certify southern state grapes area free for the RG 2 pest *Maconellicoccus hirsutus*
	Other	Growers are not required to register with AQIS for export under this treatment.
Appendix 3 Fumigation	Strawberries	Growers are not required to register with AQIS for export under this treatment.
	Watermelons	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production
Appendix 4 Dimethoate	Capsicums	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production and also for the control of RG 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Cucumbers, Honeydews, Scallopinis, and Tomatoes	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 5 Cold Treatment	Avocadoes	Growers must register with AQIS to maintain field controls for the RG 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Citrus	Queensland growers must register with AQIS to maintain field controls for the RG 2 pest *Guignardia citricarpa* (citrus black spot). Other state departments survey for citrus black spot, negating the need for grower registration.
	Grapes	Growers must register with AQIS to maintain field controls for the RG2 pest *Conogethes punctiferales* (yellow peach moth). AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus (hibiscus mealybug).
Appendix 6 Non Host	Pineapples	Growers are not required to register with AQIS for smooth cayenne variety pineapples under this treatment. Growers must keep records verifying smooth cayenne parentage.
	Bananas	Growers are required to register with AQIS to maintain field controls for the high impact non fruit fly pest *Maconellicoccus hirsutus* (pink hibiscus mealy bug).
Appendix 10 In field controls	All commodities	All commodities which require Appendix 10 (In field controls for fruit fly) must be registered.
Appendix 11 Winter window	Rockmelons, honeydew melons, cucumbers, watermelons zucchinis and scallopinis	Growers must register with AQIS under Appendix 11 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 12 Irradiation	Mango	Growers are not required to be registered under this pathway
	Papaya	If exporters intend to irradiate at 150Gy growers must register for the control of the high impact non fruit fly pest *Conogethes punctiferales*.

3.2 General requirements

Growers of commodities requiring registration must maintain spray diaries and implement field hygiene requirements that demonstrate appropriate management and recording for those pests listed as RG2 and RG3 in the pest lists (Attachment 1).

3.3 Registration

Application for registration (Attachment 2.1) will be made to the AQIS office in the grower's region. To ensure there are no delays with processing and completing registrations it is recommended that applications be forwarded to AQIS no later than 6 weeks prior to export. Applications are processed in order of receipt; late applications may be subject to delays. Applications must include a property map identifying blocks on which the relevant NZ BQA commodities are grown.

Growers may apply direct to their regional AQIS office or to the packhouse they are supplying. Packhouses must forward any grower applications through to AQIS as soon as possible for inclusion on the regions “master” grower/packer list.

Once application for registration is received regional AQIS staff will organise a time to visit the property to conduct a preliminary audit. During the visit the inspector will ensure the grower(s) are aware of their responsibilities under the SOM, check relevant documentation eg spray diaries, conduct an inspection of the property (registered blocks), and will allocate a grower registration number.

Growers that have previously registered under this arrangement in the previous season without non conformance will not require an AQIS visit prior to export commencement. However, an audit must be performed early in the season.

NOTE: **In the above circumstance, growers MUST notify AQIS of their intent to commence export at least 6 weeks prior to export. Growers must provide evidence that required control measures have been carried out (eg spray diaries). If AQIS approval is granted, a time for an audit visit will be organised. Failure to comply with these directions may mean growers, irrespective of previous participation, will require an “initial audit” before being allowed to commence export.**

3.4 Orchard responsibilities

Growers must apply recommended field controls a minimum of 4 weeks prior to commencement of harvest. Field monitoring and spray diary records must be kept for all activities relating to registered blocks. The applicable grower declaration form (Attachments 2.13, and 2.14) for the product must be completed and accompany each consignment of product intended for export.

NOTE: the Queensland Department of Primary Industries (QDPI) previously issued a farm note (F76/DEC92) which detailed requirements for field control programs against infestation of *Bactrocera cucumis*, these constituted the minimum requirements for the control of fruit fly. This farm note is no longer in print but the requirements are still accepted by AQIS. Newer chemicals developed and registered for the control of fruit fly may be utilised. All spray programs to meet AQIS requirements must be carried out at the recommended label rates. All activities relating to field controls must be recorded and held on file for a 12 month period.

Growers are permitted to use the services of a state registered crop monitor. Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered grower. Records including spray regime and recommendations must be available to AQIS upon request.

NOTE: All cartons of produce must be marked with some form of grower and packhouse identification to enable traceback.

3.4.1 Citrus growers

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer) — however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the southern states of New South Wales, Victoria and South Australia are not specifically required to be registered for this program, monitoring and spray diaries must be kept because of the RG2 pest *Phyllocnistis citrella*.

3.4.2 Avocado growers

All avocadoes must be sourced from growers and blocks registered with an official tree certification scheme (such as the Avocado Nursery Voluntary Accreditation Scheme or relevant state departments) to ensure freedom from avocado sun blotch viroid and undergone appropriate pest control activities that are effective against or been sourced from an area free (verified by an official detection survey) from cercospora spot blotch (*Pseudocercospora purpurea).*

In addition to the standard grower requirements listed in Section 3.3, avocado growers must supply the following documented evidence for registration:

- grower maps to include indexed and non-indexed fruit;
- official verification of orchard freedom from sun blotch viroid;
- sterilisation procedures between indexed and non-indexed blocks;
- buffer zone/s between indexed and non indexed blocks (i.e. row spacing between blocks); and
- pruning procedures to prevent sun blotch viroid re-infestation (i.e. no foliage or fruit contact with soil or neighbouring avocado trees)

NOTE: Further details on avocado accreditation for sun blotch viroid can be sourced from the Australian Avocado Growers Association or State Government Departments of Agriculture (or equivalents).

3.5 Audits

AQIS will audit growers to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency*

Growers will receive an initial audit prior to season commencement (or early in export season if previously registered subject to conditions above) and one further audit during the season.

For tomatoes and winter window commodities, AQIS will undertake monthly audits of the property throughout the growing/harvesting season in the initial season (where substantial compliance is recorded then audit frequency will be reduced to 2 monthly intervals).

AQIS will conduct audits of registered growers throughout the growing/harvesting season. All audits of growers will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

NOTE: the AQIS audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure the requirements of the new treatment are being met, and to identify any problems or potential problems with implementing the treatment.

All AQIS audits will be "announced" giving the grower at least two days notice.

Unannounced monitoring audits may be conducted if they are deemed necessary by the Regional Export Manager. Unannounced monitoring audits are not chargeable unless major non-conformances are detected.

AQIS audits of grower responsibilities may be conducted simultaneously with packhouse and/or exporter audits.

3.5.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A grower found to be not managing orchard/s in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

The timing of the follow up audit is dependent on the problem and its relationship to growing/harvesting of the current crop. AQIS inspectors will determine if follow up audits are required.

3.5.2 Packhouse Approved Arrangement systems

Where a packhouse has an Approved Arrangement (AA) with AQIS and is packing a commodity for which grower registration is required, the packhouse must register and audit growers in the following manner:

. on initial registration;
. following registration at least once during the growing season; and
. in subsequent seasons once during each growing season.

During AQIS auditing of AA establishments, a sample of registered growers will be reviewed for compliance with the requirements of the SOM. If a major non-conformance is detected, the suspension of the packhouse may be considered necessary as it is the packhouse that is responsible for ensuring compliance with AQIS/New Zealand requirements. AQIS audits of growers registered by the packhouse will be conducted on the following basis:

. in the initial year of registration – 5% of all growers;
. subject to compliance the previous year – 2½% of all growers;
. in non-conformances were detected at a previous audit – increase random selection of growers to 10% of all growers.

3.5.3 Security and supervision

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment

SECTION 4 CROP MONITOR RESPONSIBILITIES

4.1 Registration

Crop monitors must register with AQIS (Attachment 2.4) to undertake crop monitoring duties for the NZ BQA.

A crop monitor will include in their application, details of relevant registered growers and the commodities covered.

4.2 Audit

Crop monitors will provide registered grower property records upon AQIS/MAF request. AQIS will perform random audits of each registered crop monitor at least once per year/season for each commodity field monitoring service provided. Audits will include randomly selected growers.

If three growers (minimum) are covered by the same crop monitor, and audits reveal substantial compliance, additional grower audits of the crop monitor may be waived by the Export Manager for that year/season.

All audits of crop monitors will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

4.3 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A crop monitor found to be not managing responsibilities in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

SECTION 5 PACKHOUSE RESPONSIBILITIES

5.1 General requirements

Packhouses are required to maintain secure conditions for NZ BQA commodities and have documented systems in place to ensure grower identification and segregation is maintained.

All cartons must be marked with a standard trade description in accordance with the *Export Control (Plants and Plant Products) Orders 2005* and some form of grower and packhouse identification.

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, packhouses (where applicable) must be registered specifically for New Zealand. Application for registration (Attachment 2.2) will be made directly to AQIS regional offices.

5.2 Documentation

Packhouses are responsible for maintaining all documentation and must provide to AQIS the following upon request:

i. copy packhouse registration form;
ii. list of growers registered with AQIS who supply to the establishment;
iii. copy of grower registration forms;
iv. receival/despatch records of produce from individual growers; and
v. acceptance of inspection, loadout and security delegation (where applicable)

Export documentation will be held on file for 2 years (minimum) and are subject to AQIS/MAF audit.

5.3 Delegation of exporter responsibilities

5.3.1 General

Where a packhouse has been delegated and accepted exporter responsibilities in accordance with directions contained in the SOM, the packhouse must undertake and record all functions delegated to them. Delegated responsibilities may include:

. the security of cleared/treated produce whilst on premise;

. supervision of loading and unloading of all consignments into and out of the packhouse premise;

. clear identification of all New Zealand destined produce;

. documenting all incoming and outgoing produce intended for export under the NZ BQA; and

. inspections.

Packhouses will be audited to ensure requirements for these functions are known.

5.3.2 Security and supervision

The exporter delegate (ED) will arrange appropriate transportation of treated products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of delegation acceptance on file.

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to Export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by AQIS.

5.3.3 Inspection

Exporter inspection may be undertaken at a packhouse when delegated. See Section 7.2 for more details about exporter delegate inspections. A packhouse inspection will satisfy requirements for an exporter inspection if performed by an approved ED. Inspections must be recorded (refer to Attachment 2.6) and retained for audit purposes. A copy of the inspection record must accompany the consignment to the AQIS inspection.

The exporter/ED can elect AQIS inspection on a grower or consignment line basis. If the exporter/ED elects to undertake a consignment line inspection, then a copy of the grower line inspection record must be presented at AQIS inspection with the exporter/ED inspection record.

5.4 Audit

AQIS will audit packhouses to ensure compliance with NZ BQA requirements. Details of these audits can be found in *Table 7 – Audit Frequency.*

Grower registers, staff training, completion and storage of records and security responsibilities will be audited by AQIS. Variance to audit requirements can be made at the discretion of the Export Manager.

AA packhouses will be audited for compliance with the NZ BQA as per the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP

All audits of packhouses will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

AQIS audits of packhouse responsibilities may be conducted simultaneously with grower and/or exporter audits.

5.4.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office

must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A packhouse found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

5.5 Approved Arrangements – Packhouse

5.5.1 General requirements

The following activities must be undertaken by AA packhouses:

(a) All individual packages must include grower numbers or equivalent codes and packhouse numbers.

(b) Declared fruit fly free area packhouses must have a register of all growers' names and addresses and allocated grower numbers for all NZ BQA commodities.

(c) Should area freedom suspension zones be established, packhouses must be able to provide separate registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals are required to show procedures for identification, segregation and packing processes to ensure "area free" commodities cannot be contaminated whilst on the establishment and/or surrounds.

(d) It is recommended contingency plans are incorporated within quality manuals to address additional procedures required in the event of fruit fly outbreaks. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

(e) Packhouses not undertaking official disinfestation treatments and that do not have Risk Group 2 or 3 pests; will not need to include additional systems to their Quality Manuals.

(f) Packhouses with Risk Group 2 or 3 pests will need to ensure grower registration, commodity segregation; identification and inspections meet the NZ BQA. It is likely some quality manuals will need to be amended or have attached an appendix to meet the new export requirements for NZ BQA.

(g) To gain accreditation, five joint inspections will be undertaken with AQIS to assess the ability of packhouse staff to perform inspections in accordance with the directions contained in the SOM.

AA packhouse conducting "treatments" under the NZ BQA must be registered for this purpose in addition to normal registration requirements. Section 4.7 of the SOM outlines the requirements for Treatment Centres.

5.5.2 Audit

AA packhouses with NZ BQA responsibilities incorporated into their current Quality Manuals will be audited in conjunction with standard auditing requirements.

Those choosing to separate NZ BQA commodity responsibilities from other AA accreditation will have the two systems audited separately but within the usual audit schedules applying to the establishment.

Establishments with RG 2 pests will have a percentage of those registered growers audited to ensure compliance with the NZ BQA.

Packhouses who elect to register growers of commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. On initial registration,
. Following registration, at least once during the growing season; and
. Continual registration- once during each growing season.

For AQIS audits, registered growers will be randomly selected on the following basis;

. Initial year of registration - 5% of all growers registered by the packhouse
. Subsequent growing seasons- 2.5% of all growers registered by the packhouse (subject to compliance from previous year)
. Non-conformance at a previous audit -10% of all growers registered by the packhouse

Should a major nonconformance be detected at audit, the packhouses will be suspended from the New Zealand program immediately. Depending on the type of nonconformance, suspension from the AQIS AA may be considered. Such a decision will be made by the AQIS AA Contact Officer in conjunction with the State Regional Manager and Canberra Office.

5.5.3 Inspection requirements

AA packhouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted when the AA establishment has systems in place that;

. Address grower field controls (horticulture extension officers, reference to crop monitors etc.)
. Have some type of formal receival inspection records
. Have sorter and grader recording systems within the processing line.

In order to properly document inspections for NZ BQA commodities, AA packhouse will undertake “in-line” consignment inspections according to the following table;

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 3 sets out sampling regimes that can be applied as in-line process controls within an AA packhouse. The maximum continuous time run for New Zealand is a 24 hour process. It is extremely important this type of in-line process control is undertaken and recorded for each consignment run of NZ BQA commodities.

All in-line process controls (Table 3) must be undertaken by an AQIS Approved Inspector. Where inspections are performed as per Table 3, individual grower line inspections are not required.

During inspection, any fruits/vegetables that are soft, bruised or display rot spots will be cut to determine evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all produce cut will be recorded on the inspection sheets.

Packhouse can make up any type of sampling system based on Table 3. **However**, packhouse must document what regime is to be used before the initial production run and ensure the sampling regime is representative of the consignment/s being assembled.

Packhouse requirements pertaining to identification, segregation, security and records for all NZ BQA produce must be part of the Process Management System submitted for AQIS approval.

NOTE: Packhouses will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

5.5.4 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers will be included on all packages covered by the NZ BQA.

For produce being transferred intrastate or interstate, documentation will be required to ensure the receiving company and AQIS inspector can verify security and integrity of the consignment on arrival. A declaration to the following effect will be made on the “EX 222”or internal transfer note as follows:

"The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by MAF and specified tolerances have not been exceeded."

Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

5.5.5 Post treatment security

Where an AA packhouse has accepted exporter delegation for the security and loading supervision of NZ BQA commodities, the packhouse will nominate the person/s who will be responsible for carrying out and recording the following:

. The security of cleared/treated produce whilst on the premises

. Supervision of loading and unloading of all consignments into and out of the premises intended for export under NZ BQA

. Clear identification of all NZ BQA produce

. Documenting all incoming and outgoing produce intended for export to New Zealand

The exporter/ED will arrange appropriate transportation of certified NZ BQA products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of acceptance of duties on file.

For product not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export (Ex 28) and signed by an AQIS inspection officer.

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES

6.1 General requirements

Treatment centres must have documented systems of identification, segregation, process controls, post security treatment and supervision responsibilities.

All staff must be appropriately trained to carry out designated responsibilities.

6.2 Registration

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, all treatment centres must be registered (Attachment 2.3) specifically for New Zealand. Application for registration will be made directly to AQIS Regional Offices.

6.3 Audit

AQIS will audit treatment facilities to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency.*

Product identification, calibration, load out activity, completion and storage of records and security responsibilities will be audited by AQIS. Records pertaining to these aspects will be checked for accuracy at audit. Variance to audit requirements can be made at the discretion of the Export Manager.

All audits of treatment facilities will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

AQIS audits of treatment facility responsibilities may be conducted simultaneously with grower and/or exporter audits.

6.3.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A treatment centre found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

6.4 Post treatment security

6.4.1 Registration

The exporter must nominate, in their application for registration (Attachment 2.5), the person/s who will be responsible for carrying out and recording the following:

- security of treated produce whilst on the premises;
- supervision of loading and unloading of all consignments into and out of the premises;
- identification and segregation of consignments intended to be treated; and
- documenting all incoming and outgoing produce intended to be exported to New Zealand.

6.4.2 General requirements

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment

Staff loading containers will ensure minimum time delays in moving commodities from the secure area into container/s. Product should not be left in an unsecured environment for more than 15 minutes.

Approved security measures for transporting of produce will include either;

. Full shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet),

. Full enclosure of each pallet with shade mesh cloth with a maximum opening of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),

. Loading direct into panotech vans with units sealed by AQIS officers

. Cool storing unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product (except commodities treated under area freedom)

. Cool storing protected in secure packages at any temperature (except commodities treated under Area freedom)

Should any treatment operator/packhouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Export Manager for assessment and approval.

6.5 Post treatment transportation

The exporter/ED will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

Products transported to another destination for export loading must be subject to strict security provisions. The exporter/ED will ensure the transport medium is clean and other products (i.e. untreated/non-secure commodities), that could cause cross infestation are not loaded without taking appropriate security precautions. That is, either the other commodities are secured or the New Zealand produce is secured (as per Section 6.4.2).

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by AQIS.

NOTE: Export Managers may approve variations to the above documentation requirements to suit a particular state's operations. The use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is used, it is recommended audits be undertaken frequently to enable confidence within the systems.

Should inspecting officers find breaches to security during transit; consignments will be rejected. For some commodities reconditioning and re-inspection may occur.

AQIS will audit load out facilities to ensure compliance is being maintained.

6.6 Treatment Appendices

6.6.1 Appendix 3 – Fumigation

All fumigations must be performed with the amount of product space equal to or less than 50% of total air space within the chamber/tent. Fumigation treatment requirements are detailed in Table 4.

Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21 - 26°C and above	32g/m^3	Watermelon - 4 hours
15°C and above	48g/m^3	Strawberry - 3 hours

Treatment facilities must maintain documented systems. Systems will include:

1. Incoming product identification.
2. Segregation from other produce and clearly marked “New Zealand”
3. Treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment (i.e. batch numbers)
4. Treatment records
5. How measuring equipment is calibrated, how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.

It is recommended individual procedures accompanied by work instructions be written to define the processes and controls. The following criteria should be considered:

- Address how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent,
- Define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.
- How many units will be sampled to measure lowest flesh temperature of product?
- If tent fumigation is being performed, by whom and when is the tent checked for holes/tears?
- Who, how and when is temperature measuring equipment calibrated? How is this recorded?
- Where the in-process gas monitoring lines are located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?
- Who checks required fumigation dosage rate once temperature and volume are calculated?
- How is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?
- Who is responsible for checking the correct amount of fumigant is entered into the chamber/tent?
- What procedures are applied to ensure no leaks from the chamber or tent are evident?
- What period of time after initial fumigant is released into the chamber/tent will verification readings be made and using what type of equipment?

- Calibration of gas measuring equipment is undertaken how frequently and who does this?
- Calibration details are recorded where?
- At completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?
- Who has the authority to sign off the treatment certificates to enable release of produce?
- How is product identified as being treated?

NOTE: Regional Export Managers may approve variations to the above documentation requirements to suit a particular state's operating requirements.

6.6.1.2 AQIS Supervision

- Flexible tents- AQIS inspection staff will attend all fumigations being undertaken for NZ BQA. Inspection staff will attend either at commencement of fumigation or prior to completion. AQIS will verify treatment dosages, calculations and gas retention general process controls.

- Fixed capacity (chambers or fixed tents)-Treatment centres will be supervised at the commencement of the season, and then, providing substantial compliance 2 - 3 times during the season.

Fumigation centres must advise their regional AQIS office 24 hours in advance of intended fumigation treatments. If AQIS is unable to attend at the required times, arrangements can be made to allow treatment to go ahead but define how AQIS will manage the supervision requirements.

6.6.2 Appendix 4 – Dimethoate
6.6.2.1 General requirements

Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES

Commodity	Dip strength	Tolerance	Dip/spray	Time
Tomato	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Tomato	400ppm	±6% (±24ppm)	Spray	Spray for at least 10 seconds, and remain wet for at least 1 minute
Capsicum	400ppm	±6% (±24ppm)	Spray	Spray for at least 1 minute
Zucchini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Rockmelon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Cucumber	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Scallopini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute

Note: The minimum tolerance for dimethoate sample results is 376ppm. Treatment centres will be suspended if samples fall below this level. Treatment centres will be reinstated when AQIS has received notification of a conforming dimethoate sample.

Treatment facilities must maintain documented systems. Systems will include:

- Chemical to must be used by expiry date;
- Chemical to be stored at temperatures below 40°C. It has been determined when temperatures rise above 46°C (for even 1 day), the active ingredient will degrade;
- All products will be free of soil;
- The treatment must be the last process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted;

- The treatment centre will nominate a person/s to prepare and record each consignment or batch lot;
- The treatment centre will prepare treatments immediately prior to use and have systems in place for recording solution strengths. The treatment centre will also record details of the mixing of solution and any topping up during processing which allows for chemical wash out. Details will include times and indicate volumes of product treated at the time of topping up.

Each treatment operator will be required to document their method/s of dipping and must include:

- Size of the dip tank
- Method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc)
- Maximum volume of water required for any/each treatment
- Amount of chemical needed to achieve the required ppm level active ingredient
- Minimum allowable solution level
- Maintenance of active ingredient level (i.e. "top up" levels)
- Treatment operators will have a system in place identifying treated and untreated products. Labels must be clear and visible on pallets/bins/crates etc
- After dipping, all products must be identified as being "treated".

NOTE: Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems demonstrating solution can be carried over without losing efficacy.

6.6.2.2 Waxed produce

The application of waxes or oils prior to dimethoate treatment is prohibited. For treated produce, application of waxes or oils will only be allowed at the discretion of the Export Manager.

6.6.2.3 Sampling

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment. AQIS inspection staff will undertake analysis of chemical dipping strengths on the following basis:

AQIS sampling – Monthly during the first season. For continuous registration sampling may be extended to twice during the season once substantial compliance has been established.

Industry sampling – Monthly for the first 3 months of each season and one additional sample if the treatment period is greater than 4 months.

6.6.2.4 AQIS audit

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season.

. **First year of registration**

- Monthly during the treatment season.

. **Continuous registration without non-conformance**

- Twice during the treatment season.

6.6.3 Appendix 5 – Cold treatment

6.6.3.1 General requirements

Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS

Commodity	Temperature	Period
Pear, tablegrape, citrus fruits (option 1)	≤ 0°C	13 days
Pear, tablegrape, citrus fruits (option 2)	1°C (± 0.6°C)	16 days
Avocadoes	1°C (± 0.2°C)	16 days

Cold storage treatment facilities must maintain documented systems. Systems will include:

- Minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of product or less. For each additional 250 cu.m. of product, or part thereof, one additional pulp sensor will be used;
- Thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to AQIS;
- The warmest area of each cool storage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One pulp sensor will be placed at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors;
- For operators of controlled atmosphere cool stores (pome fruits), records must be available which detail 16 continuous days of treatment at 1°C ± 0.6°C or 13 continuous days of treatment of 0°C or below during the storage period.

6.6.3.2 Temperature recording

- Continuous - strip charts or data log sheets for each cold treatment. Temperature recorders must be capable of monitoring pulp temperatures. Air temperature recorders are not acceptable.

- Intermittent - sensor temperatures will be manually recorded twice daily (morning and afternoon) for each cold treatment and verified once every 4 days by AQIS.

Temperature records will be retained and made available for auditing purposes by AQIS/MAF upon request.

6.6.3.3 Record requirements

Details to be recorded include:

- Date and results of sensor/probe calibrations
- Date chamber was loaded with produce
- Type and variety of produce treated, the quantity by lots involved, all to be identified by packhouse and exporter.
- Date the maximum pulp temperatures initially recorded 1°C ± 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded. Or, date the pulp temperature of the fruit within the chamber recorded 13 days at 0°/below or equivalent.
- Either continuous print out records or daily records of a.m. and p.m. temperatures within the chamber throughout the treatment program.

- Date produce was cleared from chamber with details of post treatment security and dispatch of produce.
- Date and results of re-calibration of sensors following completion of treatment.

6.6.3.4 AQIS supervision

AQIS will supervise calibration of sensors at commencement and completion of each cold disinfestation treatment.

Where the refrigeration unit is equipped with a print out recorder, AQIS will initiate treatment once the chamber has stabilised at the required temperature.

For cold storage centres using manual recording devices, AQIS inspection staff will supervise the disinfestation treatment every 3-4 days.

AQIS will verify and sign satisfactorily completed treatment records. Both AQIS and the treatment facility are to maintain copies of the treatments on file.

6.6.4 Appendix 12 – Irradiation

The treatment rate specified by MAF for mangoes exported from Australia is Dmin 250Gy.

The treatment rate specified by MAF for papaya exported from Australia is Dmin 150Gy. New Zealand MAFF requires Australia to undertake appropriate pest control activities for the *Conogethes punctiferalis* (yellow peach moth) prior to export (This may include irradiation at 250Gy).

The Food Standards Australia & New Zealand (FSANZ) standard for irradiated tropical fruits has a Dmax of 1000gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au

Treatment centres will be required to carry out verification testing to determine the required response on target organisms has been achieved in accordance with International Standard Phytosanitary Measures (ISPM) # 18 - *Guidelines for the use of irradiation as a phytosanitary measure* (www.ippc.int). The records of this verification must be made available to AQIS/MAF upon request.

Ionizing radiation may be provided by radioactive isotopes (gamma rays from cobalt-60), electrons generated from machine sources (up to 10 MeV), or by x-rays (up to 5 MeV) (limits set by Codex Alimentarius). The unit of measurement for absorbed dose is gray (Gy).

Treatment procedures must ensure the minimum absorbed dose (Dmin) is fully attained throughout the commodity to provide the prescribed level of efficacy. Owing to the differences in the configuration of treatment lots, higher doses may be required to ensure the Dmin is achieved throughout the configured consignment or lot; these doses must not exceed the Dmax.

6.6.4.1 Dosimetry

Dosimetry ensures the required Dmin for a particular commodity was delivered to all parts of the consignment. The following conditions for dosimetry systems must be in place:

- Capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax)

- Calibrated in accordance with international standards or appropriate national standards (ISO/ASTM 51261 "Selection and Calibration of Dosimetry Systems for Radiation Processing", ISO/ASTM 51204 "Dosimetry in Gamma Irradiation Facilities for Food Processing" and ASTM guide - F1355 "Irradiation of Fresh Fruits as a Phytosanitary Treatment", and ISPM 18)
- Appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
- Evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
- Consider variations due to density and composition of the material treated, shape and size, orientation of the product, stacking, volume and packaging;
- Dose mapping of the product in each geometric packing configuration, arrangement and product density used during routine treatments must be carried out prior to the approval of the facility. Only configurations approved by AQIS can be used for actual treatments;
- All components of the dosimetry system must be calibrated according to documented standard operating procedures. An independent organisation recognized by AQIS should assess performance of the dosimetry system;
- An accurate measurement of absorbed dose in a consignment is critical for determining and monitoring efficacy and is part of the verification process. The required number, location and frequency of these measurements should be prescribed based on the specific equipment, processes, commodities, relevant standards and phytosanitary requirements.

6.6.4.2 Dose Mapping

- Dose mapping studies must be conducted to fully characterize the dose distribution within the irradiation chambers and commodity, and demonstrate the treatment consistently meets the prescribed requirements under defined and controlled conditions. Dose mapping data from a minimum of three runs on any particular configuration must be provided to AQIS for verification of Dmin points etc. A minimum of three runs in a physical configuration is required for verification of Dmin (standard).
- Dose mapping must be done in accordance with documented (proven) standard operating procedures. The information from the dose mapping studies is used in the selection of locations for dosimeters during routine processing.
- Independent dose mapping for incomplete (partially-filled) as well as first and last process loads is required to determine if the absorbed-dose distribution is significantly different from a routine load and to adjust the treatment accordingly.

6.6.4.3 Facility records and traceability

Treatment facility operators must keep and maintain records addressing the areas listed below.

- Appropriate treatment records for phytosanitary purposes must be kept by the irradiation facility to ensure traceability of treated lots. Records for every treatment must be kept.
- Dosimetry records must be kept by the treatment facility for at least one full year after treatment. Records must be made available to AQIS on request.

Records kept by treatment centres should also address the following:
- Identification of facility and responsible parties
- Purpose of treatment
- Target regulated pest(s)
- Lot size, volume and identification, including number of articles or packages
- Identifying markings or characteristics
- Quantity in lot

- Absorbed doses (target and measured)
- Date of treatment
- Observed deviations from treatment specification.

6.7 Tablegrape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti*

6.7.1 General requirements

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern.

MAF have directed AQIS to either undertake stringent field control programs to eliminate this pest or an agreed treatment effective against redback spiders. The Australian tablegrape industry has opted for mandatory fumigation using a sulphur dioxide - carbon dioxide treatment.

In addition to treatment centre registration, fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Treatment centres carrying out fumigations on tablegrapes must meet the general requirements outlined above for treatment centres and the listed criteria detailed in Section 6.5.1 of the SOM.

6.7.2 Treatment

The mandatory fumigation treatment for redback spiders is a **mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes**.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

AQIS inspection staff must sight fumigation treatment records to enable phytosanitary certification of tablegrapes.

6.7.3 Traceability

If a live redback spider is detected during inspection, systems must be in place to allow trace back to individual fumigation treatments.

6.7.4 Additional precautionary measures

Unused packaging carried over to the following season presents an additional pathway for the introduction of Redback spiders into New Zealand.

When carrying unused table grape packaging over, either pest-proofing or disinfestation of the packaging is necessary.

SECTION 7 EXPORTER RESPONSIBILITIES

7.1 General requirements

All exporters of NZ BQA products must be registered with AQIS. Exporter applications (Attachment 2.5) will be made to the appropriate regional AQIS Office.

Applications for registration will include details of the commodities and treatment pathways the exporter intends to use to meet with conditions stipulated in the SOM.

AQIS will accept the application if details of treatment centres are not known at the time, but exports of the particular commodities will not be permitted until relevant information is provided to AQIS.

Whilst exporters can delegate some duties, the exporter will remain ultimately responsible for all activities pertaining to the inspection, security and loading of product following treatment.

Exporters must ensure at all times either directly or by delegation:

. Product security during loading, transport and export consignment consolidation is not compromised and there can be no substitution or cross infestation of product following treatment.

. Exporter inspection requirements as detailed in the SOM are performed by qualified staff and records are kept for all inspections performed.

. Inspection records are given for each grower line presented for AQIS inspection.

. Liaison with AQIS/State Officers takes place as necessary to advise of product movement and inspection requirements,

. Documentation, including phytosanitary certificate endorsements are maintained.

7.2 Exporter Inspection

Where grower or consignment line inspections are performed by the exporter, full details of the inspection performed will be recorded (Attachment 2.6).

Exporter inspections must be undertaken at an appropriate sampling rate, as given in *Table 1* of the SOM.

Export inspection responsibilities delegated to another party will be acknowledged and verified in writing. Copies of documentation will be held on appropriate company filing systems (Attachment 2.5).

Exporters need to ensure all staff undertaking inspection duties are properly trained in pest and weed seed identification of quarantine concern to New Zealand and have been audited by AQIS.

The exporter/ED can elect AQIS inspection on a grower or consignment line basis. If the exporter/ED elects to undertake a consignment line inspection, then a copy of the grower line inspection record must be presented at AQIS inspection with the exporter/ED inspection record.

During exporter inspections, any soft, bruised or rotted products will be cut to determine evidence of fruit fly infestation. Results of products cut will be noted on the inspection record. A copy of this record must be presented with the consignment for AQIS inspection. Inspection records together with other documentation relating to the consignment must be held on file for 2 years and is subject to AQIS/MAF audit.

All inspections, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10.

NOTE: Accredited AA establishments are not required to undertake end-point inspections if procedures enable a 600 unit in-line inspection and the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

7.2.1 Split Consignment Inspections

Following exporter/ED grower line inspections, exporters can elect an AQIS ‘consignment’ inspection even if the 'consignment' is to be split to varying destinations and differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any produce not forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: "Split consignment" procedures cannot be implemented until AQIS has approved the necessary documentation and record keeping systems.

Exporters/importers wanting to reduce MAF on arrival inspections of split consignments must adopt a system which fully documents the management procedures. Any procedure must include:

. Notification of consignment details to MAF as they occur.

. New Zealand communication links (importer and MAF contacts).

. Flow chart detailing how the phytosanitary certificate moves through the system.

7.3 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers, will be included on all packages covered by the NZ BQA.

A declaration to this effect will be made on the Notice of Intention to Export "Export Permit" (EX 28), EX186 (if appropriate), or in the Exporter Declaration/Comments box in an RFP as follows:

> “The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by NZ MAF and specified tolerances have not been exceeded”

It is important that all phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX 28, the exporter must maintain a documented link to the

Notice of Intention to Export (EX28). This system must be approved by the Regional Export Manager.

Trace back for consignments drawn from several RFP's is obtained through the EXDOC system.

7.4 Rejected Produce

If any stages of live fruit fly are found during an exporter/ED inspection, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other NZ BQA produce, and identified as not suitable for export to New Zealand.

The exporter or ED must immediately notify AQIS of the detection.

AQIS will formally advise and suspend the relevant treatment centre pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

Should during the exporter/ED inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS. The product must be identified as failed for export to New Zealand and segregated from all other NZ BQA products. Reconditioning of consignment may occur where applicable.

AQIS will formally advise and suspend the relevant grower pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the occurrence, reinstatement for the NZ BQA may be permitted.

The mutual fumigation recognition arrangement can be used when regulated pests are detected. This arrangement cannot be used as a pre-emptive measure. Please refer to PHYTO for more information (http://www.aqis.gov.au/phyto).

7.5 Security of Produce

Export shipping or airfreight containers will be inspected by a freight forwarding agent where delegated or exporter for cleanliness and condition (any openings in containers will be taped over).

Container inspections can be delegated to a container park. Persons carrying out inspections must be audited to ensure they are aware of their responsibilities. If inspections are carried out at a container park, copies of completed inspection records must be faxed (or sent with container documents) to point of loading and retained on file by both the container park and exporter/freight forwarder etc.

NOTE: It is only necessary to complete the "Container report sheet" for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

7.6 Audit

Exporters will undergo one audit per year. All relevant documentation for NZ BQA consignments must be made available to AQIS upon request. Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter inspections and documentation (i.e. RFP's, EX 186, EX28's and phytosanitary certificates).

Persons approved to act as an ED will undergo two audits per year. Audits will include documentation, knowledge of regulated pests, inspection techniques, sample selection and knowledge of relevant parts of the SOM.

7.6.1 Non-compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

An exporter found to be not managing responsibilities in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

SECTION 8 GOVERNMENT RESPONSIBILITIES

This section details the responsibilities associated for participants under the SOM to ensure requirements of the SOM are adhered to.

All systems will be subject to random audits by the AQIS Canberra office and MAF will audit systems at frequent intervals. The audits will include measurement of pathway compliance from growers (where required) through to final export container loading and associated documentation.

8.1 AQIS Canberra office

The AQIS organisation structure and management flow chart is provided at the end of this section. It is recommended that each AQIS Regional office develop its own organisation structure and management flow chart as it will apply to the management of the NZ BQA, and include this information for distribution within that state.

8.1.1 Manager - Plant Programs

Will be responsible for ensuring;

- All components of the SOM are being complied with consistently, over all commodities and treatments through all states.
- Regular audits of State Departments (where applicable) and AQIS systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the NZ BQA and that a proper record management system is available and easily accessible.
- AQIS Regional offices are conducting audits of AA as detailed in the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP and the requirements of the NZ BQA and this manual.
- Where non-conformances are found, that suitable corrective action is undertaken and verified by AQIS.
- Collate and circulate up to date national lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.
- That all amendments to this manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.
- That audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

8.2 AQIS State Offices

AQIS state offices, through the Regional Managers and Export Managers located in Queensland, New South Wales, Victoria, Northern Territory, Western Australia, Tasmania and South Australia are responsible for the following:

- The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM.
- Ensure all exporters, treatment centres, packhouse and growers (where applicable), are meeting the requirements of the NZ BQA and the directions contained in the SOM.
- Ensure inspection staff are trained in the terms, responsibilities and conditions for all NZ BQA commodities being exported from that state.

- Ensure all required components of the export pathways for commodities are registered for that state.
- Ensure audits (including internal audits), are being conducted at the correct frequency and the measurement of the system and corrective action where required, has been effected and recorded.
- Ensuring Canberra Office (Program Manager) is informed where any breaches of the conditions of this manual are observed.
- Ensuring all inspectors in their state, involved in the NZ BQA export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported in any district of Australia.
- Develop a system of recording registrations, and that such records are maintained so they are auditable.
- Ensuring the Canberra office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

8.2.1 Registration requirements

AQIS offices will implement a registration system where applicable for all growers, packhouses, treatment centres and exporters.

8.2.2 Sampling requirements

For the purpose of the treatments detailed in this manual the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

8.2.3 AQIS inspection procedures

Exporters will provide AQIS with exporter/ED inspection records prior to inspection. If all export documentation is not provided or incomplete, the consignment will not be inspected. If the exporter/ED elects to undertake a consignment line inspection, then a copy of the grower line inspection record must be presented at AQIS inspection along with the exporter/ED inspection record.

Inspections performed by AQIS will be recorded on "Inspection Record - New Zealand" (Attachment 2.6)

NOTE: Alternative types of inspection records can be used as long as they contain the information supplied on the inspection record

AQIS inspectors must conduct inspections at the same sampling rate (Table 1) undertaken by the exporter/ED.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

Packaging must be checked during the inspection for compliance with the *Export Control (Plants and Plant Products) Orders, 2005* and requirements of the SOM.

NOTE: AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

8.2.4 Consignment line samples

Following exporter/ED inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines consist of commodities from a common treatment pathway (can be different growers).

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. The following points may be taken into account in determining selection of sample cartons:

- From the grower submitting the largest grower line within the consignment.
- From the commodity comprising the greatest quantity in the consignment line.
- At least one carton from the commodity seen to present the greatest quarantine risk.
- At least one carton from any known "poorer" performing growers/packers or from a newly registered grower or packer.

Consignment lines passed after AQIS inspection will be identified as "Passed for New Zealand" and immediately segregated. It is recommended exporters implement a system (i.e. stickers on pallets) to make identification of passed consignments easier.

8.2.5 Rejection procedures

A rejection upon inspection by AQIS of either a consignment or grower line does not necessarily indicate a packhouse or grower has breached the conditions of the NZ BQA. However the rejection does indicate a possible problem within the packer/exporter system and will be recorded.

All rejections are to be recorded on AQIS Form Ex 161 (Inspection Advice) and must detail the grower, packer and export pathway through which the commodity has passed.

Exporters/EDs who fail two inspections in any one season must be audited immediately. This will ascertain any reasons AQIS may consider necessary for suspension or corrective actions to be undertaken.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for RG3 pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of "Area Freedom," all districts in that state are suspended. Audit/s must be undertaken at the earliest opportunity.
- Any rejection for RG2 pests – AQIS Canberra office to be informed immediately to consider if audit of grower, packer, exporter or ED is necessary. This may depend on type and quantity of infestation detected. If applicable, the exporter can choose to undertake corrective action (i.e. treatment, withdrawal of the offending grower). Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for AQIS inspection.
- Any rejection for RG1/regulated pests - The consignment can be totally withdrawn or corrective action undertaken. Corrective action can include treatment, withdrawal of the offending grower. Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for AQIS inspection.

8.3 Audit

AQIS inspection staff will conduct audits of applicable growers, packhouse, treatment centres, exporters and exporter's delegates to ensure compliance with relevant section of this manual.

8.3.1 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

- Exporter/delegate inspection records.
- Grower pest monitoring records and pest control diaries (commodity specific).
- Packer training and associated pest identification.
- General hygiene of premises.
- Segregation and identification of produce.
- Staff responsibilities,
- Exporter or exporter's delegate inspection procedures and pest/weed identification skills.

Should auditing fail to identify any breach of the NZ BQA and responsibility of the SOM, all parties will be reinstated.

Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the Export Manager who will co-ordinate necessary action and advise all parties at the earliest opportunity.

Copies of any audit will be given to the relevant components of the pathway audited and kept on file.

Inspectors undertaking these audits must be appropriately trained and accredited.

Table 7 - AQIS AUDIT FREQUENCY

	Initial Year of registration	**Continuous Registration**	**Winter Window**
Grower	Initial audit prior to export + One additional audit during season *** Tomatoes** – Initial audit prior to export + monthly audits of property & spray diaries	One audit early in new season (no initial audit required) *** Tomatoes** – Initial audit prior to export, extending to 2 monthly if substantial compliance is shown	Monthly audits of property & spray diaries * Audits extended to 2 monthly if substantial compliance is shown
Packer	Initial audit prior to export + One additional audit during season	Minimum one audit annually	
Treatment Centre	Monthly audits required in first year **Dimethoate -** One initial audit during the first 10 days of season + 2 audits during the season	**Fumigation** - One annual audit in first 10 days of season (to be conducted during a treatment) + 2-3 times during season **Cold Storage** – One annual during first 3 treatments **Dimethoate –** Two audits per year/season if substantial compliance is shown	
Exporter Delegate	Initial audit prior to export + One additional audit during season	Minimum two audits per year If fail at two AQIS end point inspections, immediate audit required	
Exporter	One audit Annually	One audit Annually	
Crop monitor	One Audit Annually	One audit Annually	

8.4 Fruit Fly Area Freedom – State Departments

State Departments are responsible for the following:

- Where required, ensure the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual state management plans (as submitted to MAF), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of MAF Biosecurity Authority Standards 158.03.06 and 158.03.07 and
- Report any detections of economically significant fruit fly species found within trapping grids to AQIS Canberra Office within 24 hours of identification.

8.4.1 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. The procedures and controls are documented such that they can be readily demonstrated to, and audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of fruit flies and managed under the tri-state agreement between the states of New South Wales, Victoria and South Australia and:

. Reflect the requirements of New Zealand MAF Biosecurity Authority Standard 158.03.06., the
Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

. Management and control procedures for each area which have been accepted by MAF as meeting all the requirements (or equivalence) with the MAF Biosecurity Authority Standard 158.03.06.

. State Departments must advise AQIS Canberra Office of any amendments to their management procedures at the earliest opportunity. Canberra Office will forward amendments to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (minimum annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable MAF Biosecurity Authority Standard 158.03.06.

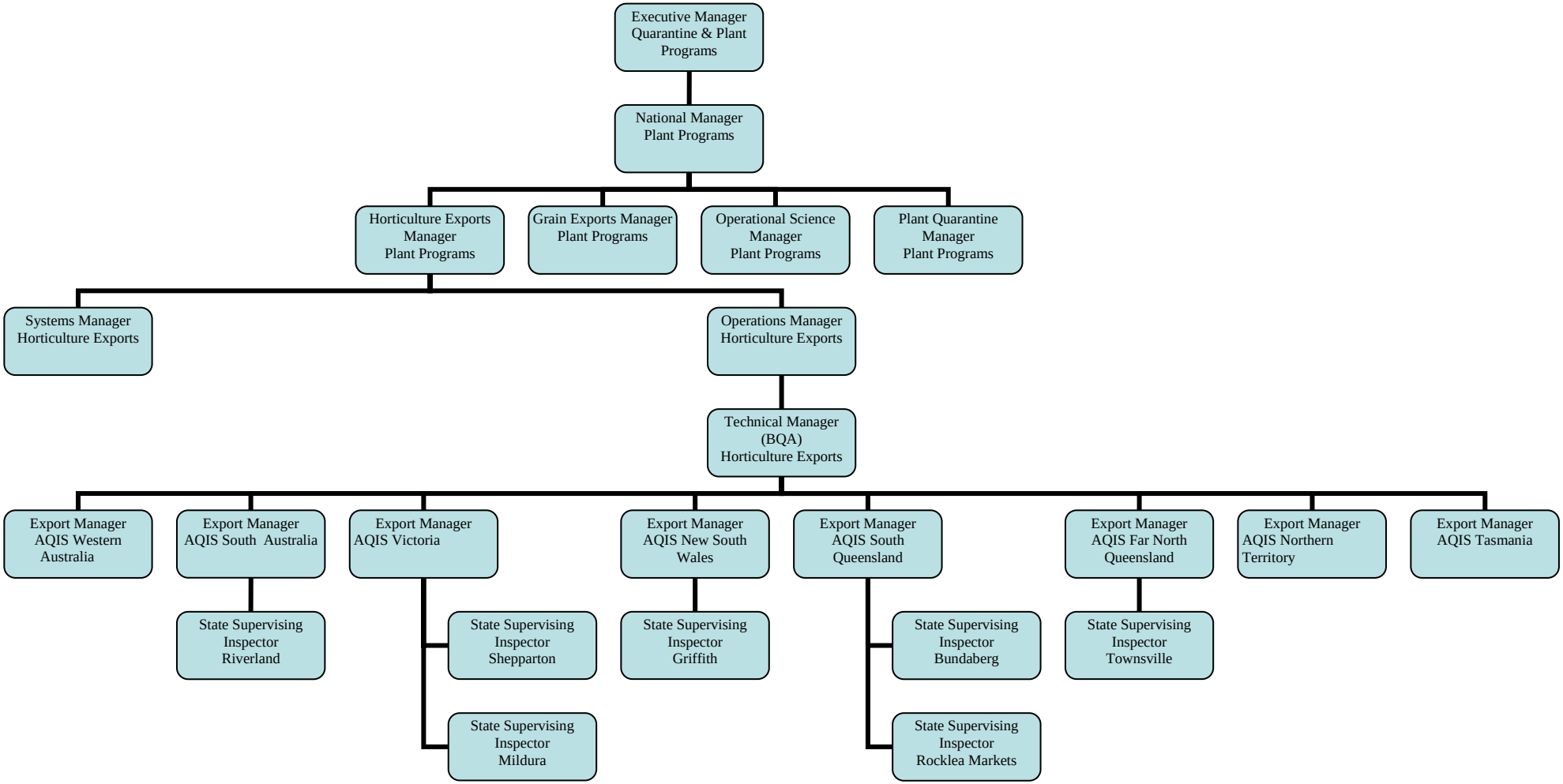
8.4.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

Attachment to Section 8.1 AQIS Plant Contact List



ATTACHMENT 1 - NEW ZEALAND PEST LIST

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under Appendices 2 (Area Freedom) and 5 (cold storage disinfestation) to the NZ BQA.

Growers and packhouse must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

- avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600-unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale

Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders’ case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Mite	

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	-

Non-regulated non plant pests/organisms

None

BANANA

Musa

Bananas can be exported to New Zealand under Appendix No. 6 – Non Host of the NZ BQA.

Growers and packhouses need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a regulated pest until official categorisation has been determined by AQIS/MAF.

***Maconellicoccus hirsutus* (pink hibiscus mealybug) is listed for bananas, and AQIS can certify freedom from this pest based on the following:**

Maconellicoccus hirsutus

1. In field controls for *Maconellicoccus hirsutus* species are a requirement of grower registration, as such pink hibiscus mealybug will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Maconellicoccus hirsutus* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

3. Pre-export inspection of fruit will identify the presence of *M. hirsutus*, and the fruit would be rejected for export to New Zealand.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Cercospora hayi	diamond spot
Chaetothyrina musarum	sooty blotch
Cladosporium spp.	cladosporium mould
Glomerella cingulata var. *minor (*anamorph *Collectotrichum gloeosporioides* var. *minor)*	anthracnose
*Guignardia musae (*anamorph *Phyllosticta musarum)*	freckle
Phytophthora palmivora	black rot
Ramichloridium musae	freckle
Aleurodicus dispersus	spiralling whitefly
Amblypelta lutescens	fruit spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Araecerus coffeae	coffee bean weevil
Aspidiotus destructor	coconut scale
Atherigona orientalis	muscid fly
Bactrocera bryoniae	**fruit fly** #
Bactrocera musae	**banana fruit fly** #

Bactrocera cucumis	**cucumber fruit fly** #
Bactrocera frauenfeldi	**fruit fly** #
Bactrocera jarvisi	**jarvis' fruit fly** #
Bactrocera neohumeralis	**lesser Queensland fruit fly** #
Bactrocera tryoni	**Queensland fruit fly** #
Ceratitis capitata	**Mediterranean fruit fly** #
Chaetanaphothrips signipennis	banana rust thrips
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Cnaphalocrocis medinalis	rice leaf folder
Dirioxa pornia	Island fruit fly
Dysmicoccus brevipes	pineapple mealybug
Elixothrips brevisetis	banana rind thrips
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Ferrisia virgata	striped mealybug
Geloptera miracula	chyrsomelid beetle
Haplothrips gowdeyi	black flower thrips
Helicoverpa assulta	cape gooseberry budworm
Hemiberlesia palmae	citrus black scale
Icerya aegyptiaca	Eygyptian fluted scale
Icerya seychellarum	Seychelles scale
Isotenes miserana	orange fruit borer
Leptoglossus gonagra	squash bug
Maconellicoccus hirsutus	**pink hibiscus mealybug #**
Melanitis leda ismene	Rice butterfly
Monolepta australis	red-shouldered leaf beetle
Opogona glycyphaga	sugar-cane bud moth
Orgyia australis	vapourer moth
Pentalonia nigronervosa	banana aphid
Pinnaspis strachani	hibiscus snow scale
Planococcus citri	citrus mealy bug
Planococcus minor	passionvine mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rhyparida discopunctulata	leaf beetle
Spodoptera exigua	beet armyworm
Thrips florum	flower thrips
Thrips hawaiiensis	banana flower thrips
Tiracola plagiata	banana fruit caterpillar
Tirathaba rufivena	fruit borer
Unaspis citri	citrus snow scale
Xenothictis sciaphila	tortricid
Brevipalpus lewisi	bunch mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	vegetable spider mite

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Erwinia carotovora	bacterial soft rot
Aspergillus flavus	aspergillus storage rot
Aspergillus niger	aspergillus rot
*Ceratocystis paradoxa (*anamorph *Thielaviopsis paradoxa)*	ceratocystis rot
Colletotrichum musae	anthracnose
Deightoniella torulosa	black tip
Fusarium pallidoroseum	fusarium rot
*Glomerella cingulata (*anamorph *Colletotrichum gloeosporioides)*	anthracnose
Lasiodiplodia theobromae	fruit and stem-end rot
*Magnaporthe grisea (*anamorph *Pyricularia grisea)*	Johnson's spot
Sclerotinia sclerotiorum	cottony rot
Agrotis ipsilon	greasy cutworm
Aonidiella aurantii	California red scale
Aphis gossypii	cotton aphid
Araecerus fasciculatus	coffee bean weevil
Aspidiotus nerii	oleander scale
Chrysodeixis eriosoma	green garden looper
Coccus hesperidum	brown soft scale
Hemiberlesia cyanophylli	cyanophyllum scale
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Hercinothrips bicinctus	banana silvering thrips
Hermetia illucens	black soldier fly
Listroderes difficilis	vegetable weevil
Pseudococcus longispinus	longtail mealybug
Rhopalosiphum maidis	corn leaf aphid
Spodoptera litura	cluster caterpillar
Brevipalpus californicus	bunch mite
Polyphagotarsonemus latus	broad mite
Tetranychus lambi	strawberry spider mite
Tetranychus urticae	twospotted spider mite

# Denotes high impact pest

CAPSICUM

Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendices 4 (dimethoate treatment) and 10 (field control programmes) to the NZ BQA/IHS.**

A number of Risk Group 2 pests are listed for capsicums, and AQIS can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. bryoniae* should it occur.
4. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. If by chance *B. tabaci* were present on harvested capsicum fruit as a hitch-hiker, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
5. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
6. Historical records show that *B. tabaci* has never been detected on capsicum fruit during AQIS pre-export inspection.

Conogethes punctiferalis

1. In field controls for *Lepidopteran* species are a requirement of grower registration, as such

YPM (Yellow Peach Moth) will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Lepidopteran spp* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

Thrips palmi

1. If *T. palmi* were present on harvested capsicum fruit, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on capsicum fruit during AQIS pre-export inspection.

Monilinia fructigena

1. This fungus does not occur in Australia.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
*Bactrocera kraussi**	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly

Homoptera	
Aleyrodidae	
Bemisia tabaci [vect]	
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Fungus

Ascomycota	
Leotiales	
Sclerotiniaceae	
Monilinia fructigena (anamorph *Monilia fructigena*)	European brown rot

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aleyrodidae	
Aleurodicus dispersus	spiralling whitefly
Trialeurodes vaporariorum [strain]	greenhouse whitefly

Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Coccidae	
Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale
Diaspididae	
Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Nectria haematococca var. *brevicona*	dry rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata f. sp. *lycopersici*	-
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *vasinfectum*	fusarium wilt

Pythiales	
Pythiaceae	
Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak

Virus

-	
-	
-	
tobacco leaf curl bigeminivirus [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Weed	
Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf
Xanthium spp. (except *X. spinosum*)	bur
Caryophyllales	
Amaranthaceae	
Amaranthus spp.	amaranthus
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Listroderes costirostris	vegetable weevil
Listroderes obliquus	vegetable weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Myzus persicae	green peach aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Pyralidae	
Sceliodes cordalis	poroporo fruit borer
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculops lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus ludeni	bean spider mite

Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Diaporthales
Valsaceae
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli*) — phomopsis stem rot
Dothideales
Mycosphaerellaceae
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*) — black leaf spot
Erysiphales
Erysiphaceae
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*) — powdery mildew
Hypocreales
Hypocreaceae
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*) — fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*) — root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*) — fusarium fruit rot
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana (anamorph *Botrytis cinerea*) — grey mould
Sclerotinia minor — sclerotinia rot
Sclerotinia sclerotiorum — cottony rot
Phyllachorales
Phyllachoraceae
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*) — bitter rot

Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*) — rhizoctonia rot
Stereales
Atheliaceae
Athelia rolfsii (anamorph *Sclerotium rolfsii*) — Rolf's disease

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Lasiodiplodia theobromae — fruit and stem-end rot
Macrophomina phaseolina — ashy stem blight
Phoma destructiva — bulb rot

Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Bacterium	
-	
-	
Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	
Agrobacterium tumefaciens	crown gall
Weed	
Angiospermae	
Asterales	
Asteraceae	
Galinsoga parviflora	
Sonchus spp.	sowthistle

Poales

Poaceae

Echinochloa spp.	grasses
Eleusine indica	goose grass
Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug

Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth

Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm

Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non-plant pests/organisms

None

CUCUMBER
Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme),**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for cucumbers. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested cucumber fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested cucumber fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspections of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the NZ BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.

2. Cucumbers exported to New Zealand under appendix 4 and 10 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	

Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	
Acrididae	

Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cladosporium cucumerinum	--
Moniliaceae	
Verticillium albo-atrum [severe strain]	progressive wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Virus

-

-
  -
    tobacco ringspot nepovirus [strain] [VO] -
    tomato spotted wilt tospovirus [strain] [VO] -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid

Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	

Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould

Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of Sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Growers and packhouse must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk Group 2 pests *Conogethes punctiferalis*. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest *Maconellicoccus hirsutus*.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug

Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail
Fungus	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	-
Coniella diplodiella	white rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	

Alternaria vitis	leaf disease
Cladosporium viticola	cladosporium leaf spot

Weed
Angiospermae
Asterales
Asteraceae

Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except *X. spinosum*) [contaminant]	bur

Geraniales
Zygophyllaceae

Tribulus terrestris [contaminant]	caltrop

Poales
Poaceae

Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass

Solanales
Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae

Latrodectus hasselti	Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	

Thripidae	
Frankliniella occidentalis	western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips
Mite	
Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Tetranychidae	
Panonychus ulmi	European red mite
Tetranychus urticae	twospotted spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Fungus	
Ascomycota	
Diatrypales	
Diatrypaceae	
Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker
Elsinoaceae	
Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose
Mycosphaerellaceae	
Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	

Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	-
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	-
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	-
Digitaria violascens [contaminant]	-
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass
Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	-
Pennisetum macrourum [contaminant]	African feather grass
Solanales	

Solanaceae

Lycium barbarum [contaminant]	boxthorn
Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

MANGO
Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Bactrocera cucumis	cucumber Fruit Fly
Bactrocera frauenfeldi	fruit Fly
Bactrocera jarvisi	jarvis' fruit fly
Bactrocera musae	banana fruit Fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera opiliae	false Oriental Fruit Fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly
Dirioxa pornia	Island Fruit Fly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	yellow peach moth
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Frankliniella schultzei	flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Helopeltis clavifer	
Icerya aegyptiaca	Egyptian fluted scale
Idioscopus clypealis	mango hopper
Idioscopus nitidulus	mango hopper
Ischnaspis longirostris	black thread scale
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Monolepta australis	red-shouldered leaf beetle

Monolepta divisa	small monolepta beetle
Nipaecoccus vastator	karoo thorn mealybug
Ophiusa tirhaca	
Penicillaria jocosatrix	mango tipborer
Phenacaspis dilatata	mango scale
Planococcus citri	Citrus mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rastrococcus sp.	
Rhyparida limbatipennis	
Saissetia miranda	Mexican black scale
Selenothrips rubrocinctus	redbanded thrips
Sternochetus mangiferae	mango seed weevil
Asterina punctiformis	
Chaetothyrina tenuissima	stem sooty blotch
Cytosphaera mangiferae	stem-end rot
Elsinoe mangiferae (anamorph Sphaceloma mangiferae)	mango scab
Fusicoccum mangiferae	
Nattrassia mangiferae	stem-end rot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangifolia	storage rot
Pestalotiopsis theae	mango blight
Pestalotiopsis virgatula	mango leaf spot
Phomopsis mangiferae	stem end rot
Pythium mangifera (anamorph Oidium mangiferae)	mango powdery mildew
Schizoparme straminea (anamorph Coniella	schizoparme fruit rot

Non-regulated pests

Pest Scientific Name	Common Name
Aonidiella aurantii	California red scale
Ceroplastes destructor	white wax scale
Epiphyas postvittana	light brown apple moth
Helicoverpa armigera	tomato fruitworm
Heliothrips haemorrhoidalis	greenhouse thrips
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Icerya purchasi	cottony cushion scale
Parasaissetia nigra	nigra scale
Pseudococcus longispinus	long tailed mealybug
Saissetia coffeae	helmet scale
Toxoptera aurantii	black citrus aphid
Toxoptera citricida	brown citrus aphid
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite

Alternaria alternata	black stalk rot
Botryosphaeria dothidea (*anamorph Fusicoccum aesculi)*	canker
Botryosphaeria parva (*anamorph Fusicoccum parvum)*	canker
Botryosphaeria rhodina	gummosis
Botryosphaeria ribis (*anamorph Lasiodiplodia theobromae)*	canker
Botryotinia fuckeliana (*anamorph Botrytis cinerea)*	grey mould
Cladosporium cladosporioides	cladosporium leaf spot
Cochliobolus hawaiiensis	leaf spot, seed rot
Colletotrichum acutatum	anthracnose
Colletotrichum coccodes	anthracnose
Dipodascus Geotrichum (*anamorph Geotrichum candidum)*	sour rot
Dothiorella aromatica	stem-end rot
Epicoccum purpurascens	black mould
Erysiphe cichoracearum (*anamorph Oidium asterispunicei)*	powdery mildew
Fusicoccum luteum	bunch rot
Glomerella cingulata (*anamorph Colletotrichum gloeosporioides)*	anthracnose
Glomerella lagenaria (*anamorph Colletotrichum orbiculare)*	
Pestalotiopsis funereal	leaf spot
Pestalotiopsis versicolor	pestalotiopsis rot
Phytophthora nicotianae	buckeye rot
Pithomyces chartarum	facial eczema fungus
Pleospora allii (*anamorph Stemphylium vesicarium)*	black mould
Rhizopus stolonifer	rhizopus soft rot
Thanatephorus cucumeris (*anamorph Rhizoctonia solani)*	rhizoctonia rot

MELON
Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 2 and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Pest Scientific Name	**Common Name**

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug

Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	-
Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--

Oomycota

Pythiales
Pythiaceae
Pythium aphanidermatum cottony leak

Zygomycota: Zygomycetes
Mucorales
Choanephoraceae
Choanephora cucurbitarum blight

Bacterium

-
-
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* bacterial rot

Virus

-
-
-
tobacco ringspot nepovirus [strain] [VO] -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	

Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Mite

Arachnida

Acarina

Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota

Dothideales

Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata (anamorph *Fusarium lateritium*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight

Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Pseudomonadaceae	
Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

PAPAYA
Papaya

Papaya can be exported to New Zealand under Appendix No. 12 - Irradiation of the NZ BQA.

Growers and packhouse choosing 250 Gray (Gy) irradiation for papaya do not need to be specifically registered for the New Zealand export program.

Growers and packhouse choosing 150 Gy irradiation and in-field controls for papaya need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

***Conogethes punctiferalis* (yellow peach moth) is listed for papaya, and AQIS can certify freedom from this pest based on the following:**

Conogethes punctiferalis

1. If infield controls for *Conogethes punctiferalis* are carried out, fruit will be irradiated at 150Gy prior to export.

2. Where irradiation is chosen as the pest control activity for *Conogethes punctiferalis* a minimum dose of 250Gy must be applied prior to export. This treatment will be considered to be a generic treatment for all regulated arthropod pests listed below.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	**Common Name**
Asperisporium caricae	black spot
Phomopsis caricae-papayae	wet fruit rot
Phytopthora capsici	buckeye rot
Phytopthora palmivora	black rot
Bactrocera cucumis	**cucumber fruit fly** #
Bactrocera frauenfeldi	**fruit Fly** #
Bactrocera jarvisi	**jarvis' fruit fly** #
Bactrocera musae	**banana fruit fly** #
Bactrocera neohumeralis	**lesser Queensland fruit fly** #
Bactrocera tryoni	**Queensland fruit fly** #
Ceratitis capitata	**Mediterranean fruit fly** #
Dirioxa pornia	Island Fruit Fly
Aleurodicus dispersus	spiraling whitefly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale

Aspidiotus destructor	coconut scale
Carpophillis maculatus	dried fruit beetle
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	**yellow peach moth** #
Eucalymnatus tessellatus	tessellated scale
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Ferrisia virgata	striped mealybug
Pericyma cruegeri	poinciana looper
Pseudaulacaspis cockerelli	Cockerell's scale
Papaya ringspot virus (type P strain)	PRSV-Type P

Non-regulated pests

Pest Scientific Name	Common Name
Brevipalpus phoenicis	passion vine mite
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria rhodina (anamorph Lasiodiplodia theobromae)	gummosis
Botryosphaeria ribis	canker
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum dematium	anthracnose
Corynespora cassicola	leaf spot
Erysiphe cruciferarum	powdery mildew
Fusarium pallidoroseum	fruit core rot
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	anthracnose
Leveillula taurica	powdery mildew
Mycosphaerella caricae (anamorph Phoma caricae-papayae)	leaf spot
Phytophthora nicotianae	buckeye rot
Rhizopus stolonifer	rhizopus soft rot
Aphis spiraecola	spirae aphid

Denotes high impact pest

PINEAPPLE
Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	

Diaspis bromeliae	pineapple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla	
Unknown Symphyla	
Symphylidae	
Hanseniella sp.	symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetes	
Dematiaceae	
Thielaviopsis paradoxa	
Moniliaceae	
Penicillium funiculosum	

Bacterium

-

-

Enterobacteriaceae
Erwinia ananas marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae
Iridomyrmex glaber black house ant
Paratrechina vaga ant
Tapinoma sp. ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name **Common Name**

Insecta
Coleoptera
Cicujidae
Cryptamorpha desjardinsii Desjardin's flat beetle
Nitidulidae
Carpophilus hemipterus dried fruit beetle
Homoptera
Coccidae
Coccus hesperidum brown soft scale
Pseudococcidae
Planococcus citri citrus mealybug
Lepidoptera
Tineidae
Opogona omoscopa detritus moth
Thysanoptera
Thripidae
Thrips tabaci onion thirps

Mite

Arachnida
Acarina
Acaridae

Rhizoglyphus sp.	acarid mite

Nematode
Secernentea
Tylenchida
Meloidogynidae

Meloidogyne javanica	Javanese root knot nematode

Fungus
Ascomycota
Hypocreales
Hypocreaceae

Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot

Oomycota
Pythiales
Pythiaceae

Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus
-
-
-

tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	Common Name
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil

Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil

Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips

Mite
Arachnida

Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Myriapod
Diplopode

Julida	
Blaniulidae	
Blaniulua guttulatus	spotted snake millipede

Mollusc
Gastropoda

Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Limacidae	
Deroceras panormitanum	brown field slug
Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO

Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and 10 (field control programs)**

Growers and packhouse that are growing/packing tomatoes for export to New Zealand under appendix 4 to the NZ BQA must be registered for this purpose.

A number of Risk Group 2 pests have been listed for tomatoes. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested tomato fruit as a hitch-hiker, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on tomato fruit during AQIS pre-export inspection.

Thrips palmi

1. If *T. palmi* were present on harvested tomato fruit, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on tomato fruit during AQIS pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export application of dimethoate spray to tomatoes (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
4. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. musae* has never been detected on tomato fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm

Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	
Antherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips

Fungus

Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak

Virus

-	
-	
-	
	-
tobacco ringspot nepovirus [strain] [VO]	

tomato spotted wilt tospovirus [strain] [VO]	-

Phytoplasma

-	
-	
-	
tomato big bud phytoplasma	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar

Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease

Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot

Non-regulated non plant pests

None

WATERMELON
Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for watermelons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the NZ BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle

Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida
Acarina

Acaridae
Tyrophagus dimidiatus mushroom mite
Tetranychidae
Eutetranychus orientalis pear leaf blister mite
Tetranychus desertorum desert spider mite
Tetranychus lombardinii southern lobed mite
Tetranychus neocaledonicus Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Ascochyta spp. -
Phomopsis cucurbitae --

Oomycota
Pythiales
Pythiaceae
Pythium spp. pythium rot

Bacterium
-
-
Enterobacteriaceae
Erwinia tracheiphila bacterial wilt
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta
Hymenoptera
Formicidae
Solenopsis geminata fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta
Coleoptera
Curculionidae
Asynonychus cervinus Fuller's rose weevil

Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	

Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Pleosporaceae
Leptosphaerulina trifolii — seed rot
Unknown Dothideales
Didymella bryoniae — cucumber stem rot
(anamorph *Phoma cucurbitacearum*)
Erysiphales
Erysiphaceae
Erysiphe cichoracearum — powdery mildew
(anamorph *Oidium asteris-punicei*)
Hypocreales
Hypocreaceae
Nectria haematococca — fusarium fruit rot
(anamorph *Fusarium solani*)
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana — grey mould
(anamorph *Botrytis cinerea*)
Sclerotinia sclerotiorum — cottony rot
Phyllachorales
Phyllachoraceae
Glomerella cingulata — bitter rot
(anamorph *Colletotrichum gloeosporioides*)
Glomerella lagenaria — --
(anamorph *Colletotrichum orbiculare*)
Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae
Thanatephorus cucumeris — rhizoctonia rot
(anamorph *Rhizoctonia solani*)
Stereales
Atheliaceae
Athelia rolfsii — Rolf's disease
(anamorph *Sclerotium rolfsii*)

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales

Sphaerioidaceae
Phoma exigua — phoma rot
Septoria cucurbitacearum — --

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales

Dematiaceae	
Alternaria cucumerina	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot

Oomycota

Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew

Bacterium

-

-	
Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI
Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for zucchinis and scallopinis. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested zucchini fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on zucchini fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to zucchini and scallopini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 11(winter window) to the NZ BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Zucchinis exported to New Zealand under Appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Aphis gossypii [vect.]	cotton aphid
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Bactrocera cucumis	**cucumber fruit fly #**
Bemisia tabaci	**sweet potato whitefly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite

Tetranychus kanzawai	**kanzawa mite #**
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite

Tomato big bud phytoplasma

Tobacco ringspot nepovirus [strain] [VO]

Non-regulated pests

Pest Scientific Name	**Common Name**
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	whitefringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph	cucumber stem rot
Phoma cucurbitacearum)	
*Dipodascus geotrichum (*anamorph	sour rot
Geotrichum candidum)	
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot

*Erysiphe cichoracearum (*anamorph *Oidium asteris-punicei)*	powdery mildew
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	
*Gibberella acuminata (*anamorph *Fusarium acuminatum)*	fusarium storage rot
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker
*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani)*	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

 # Denotes high impact pest

ATTACHMENT 2 FORMS

2.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional AQIS office**			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
EMAIL ADDRESS			
POSTAL OR BUSINESS ADDRESS			
	POST CODE		
PROPERTY ADDRESS			
	POST CODE		
REAL PROPERTY DESCRIPTION (of area under planting)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual – Amendment 6A – August 2007 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	Pumpkin
Strawberries	Rockmelon	Honeydew melon	Cucumber
Scaloppini			

2.2 APPLICATION FOR PACKHOUSE REGISTRATION

APPLICATION FOR PACKER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional AQIS office**			
NAME OF PACKER			
AQIS EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
		POST CODE	
PREMISES ADDRESS			
		POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a packer of .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual –Amendment 6A – August 2007 and agree to be bound by the conditions and restrictions contained therein as they apply to packers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	Pumpkin
Strawberries	Rockmelon	Honeydew melon	Cucumber
Scaloppini			

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION

APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW **Please post or fax this form to your local regional AQIS office**			
NAME OF TREATMENT CENTRE			
AQIS EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
		POST CODE	
PREMISES ADDRESS			
		POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a treatment centre as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual –Amendment 6A – August 2007 and agree to be bound by the conditions and restrictions contained therein as they apply to treatment centres.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

Treatment Type (please specify)

Methyl Bromide Fumigation	Dimethoate
Cold Storage	Irradiation

2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the NZ BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....
I/We have copies of the NZ BQA Systems Operation Manual – Amendment 6A – July 2007 and have the ability to recognise and identify the regulated pest and weed seeds of concern to New Zealand.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to NZ BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any NZ BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the NZ BQA and the instructions contained in the Systems Operation Manual for NZ BQA.

Signature .....
Printed Name ..... Date .....

Approved ..... Export Manager
Date ..... Seal/Stamp .....

2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

Page 1 of 2

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Amendment 6A – August 2007 of the Australian - New Zealand Bilateral Quarantine Arrangement and the NZ BQA Systems Operation Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the NZ BQA and the Systems Operation Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for NZ BQA commodities will provide properly identified inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection
The following persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	**Company**	**Commodity**	**Location**
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Page 2 of 2

Treatment Loading Supervision Authority

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the NZ BQA for and on behalf of this Company.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

The following persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of NZ BQA commodities as is required by the NZ BQA and the contents of this Manual.

Name	Company	Commodity	Location
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the NZ BQA and the Systems Operation Manual Amendment 6A – August 2007 required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

2.6 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Tick

Date	Trade Description .....
Commodity	Commodity .....
No of Cartons	Registered Grower No. .....
Registered Grower No.	Registered Packing Establishment .....
	.....
Ex 28/RFP Number/s:	Australian Origin .....
.....……	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250
Exporter/s	(Tick one) .....
	Exporter Inspection completed by:.....
	(a) Exporter
Inspector Name	(b) ED (name)
(Block Letters)	**Inspected by**:
.....	Grower Line .....
Inspector's Signature	Consignment Line .....

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NR**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed ☐ **Failed** ☐ **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Regulated Pest
****Please note, this is a template only: packhouse/ exporters are permitted to formulate their own copies of this template, provided all of the above information is contained. This form will be checked and approved at audit**

2.7 FUMIGATION RECORD

Page 1 of 2

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	Number of Cartons/Commodity	Temperatures Taken *

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

2.8 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKHOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0C$.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

2.9 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand should I/we wish to re-enter the Arrangement protocol at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in block letters	Signature	Date
.....	.....	.....

Voluntary Withdrawal

I/we agree my/our property is no longer required to be registered under the terms and conditions required for the New Zealand export trade for NZ BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand should I/we wish to re-enter the Arrangement at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in Block letters	Signature	Date
.....	.....	.....

AQIS OFFICE DOCUMENTATION
Fax to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or
Inspector's Signature

.....

2.10 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection/audit of the following property/premises:- (Grower – Packer – ED – Treatment Centre – Exporter – Freight Forwarder – Other ……) (select appropriate title)

Name .....
Address .....
.....
.....
Reg No .....

I believe for the following reasons that the entity outlined above no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) they (please indicate):

have no intention to correct the above mentioned deficiency in the immediate future

OR

are suspended until corrective action has been implemented and successful re-audit has been undertaken

I hereby declare the entity outlined above is suspended from Appendix …….. (all, 4, 10 etc) of the Australia - New Zealand NZ BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Representative Name	Representative Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

2.11 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY CAPSICUM/TOMATO CONSIGNMENTS TO BRISBANE FROM TOWNSVILLE, BUNDABERG OR CAIRNS

I, ...of .....……

.....……..

hereby declare that the ..... cartons of ……..tomatoes/capsicums (circle as applicable) consigned to..... .....……...on ..... (date) were harvested from the following registered

blocks……..

…… AND

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute (tomatoes only).

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

3. further declare ..... (insert name of supervisor) a designated person nominated by..... (insert name of exporter) has supervised the loading of this consignment for transport to .....….....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....20.....

Signature ..... Witness .....

2.12 CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28/RFP Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

2.13 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

2.14 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

<table>
<tr><td rowspan="2">Grower name and address:</td><td>Cucurbit type (please tick ✓)</td><td>Treatment (please tick ✓)</td></tr>
<tr><td>Cucumber ☐
Honeydew melon ☐
Rockmelon ☐
Scallopini ☐
Watermelon ☐
Zucchini ☐</td><td>Appendix 3 & 10 ☐
(methyl bromide)
Appendix 4 & 10 ☐
(dimethoate dip)
Appendix 10 & 11 ☐
(winter window)</td></tr>
<tr><td>Grower number:</td><td colspan="2" rowspan="3">Declaration

I,……hereby declare the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.

……. ……/……/……
Signature Date</td></tr>
<tr><td>Consignee name and address:</td></tr>
<tr><td></td></tr>
</table>

Production block number	Package type (carton, bin etc)	Number of packages	Total mass

Australia – New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual 6b

This systems operation manual incorporates the New Zealand import health standards for Australian fruit fly host material and the Australian Quarantine and Inspection Service's operational requirements.

This manual is maintained and controlled by the AQIS Plant Programs Section in Canberra

Systems Operation Manual (SOM)

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES 7

AMENDMENT RECORD 10

GLOSSARY OF TERMS 11

DEFINITIONS 12

INTRODUCTION 13

Scope of the Manual 13

SECTION 1 13

1.1 Pest categories 13
1.1.1 Risk Group 3 (RG3) Pests 13
1.1.2 Risk Group 2 (RG2) Pests 14
1.1.3 Risk Group 1 (RG1) Pests 14
1.1.4 Non Regulated Pests 14
1.1.5 Regulated Pests 14

1.2 Maximum pest levels 14

Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS 15

1.3 Contaminates 15

SECTION 2 TREATMENT APPENDICES 16

2.1 Summary 16

Table 2: REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES 16

2.2 Appendix 1 – Country freedom from fruit fly 32

2.3 Appendix 2 – Area freedom districts within Australia 32
2.3.1 General requirements 32
2.3.2 Approved area freedom districts 33

2.4 Appendix 3 – Fumigation 34

2.5 Appendix 4 – Dimethoate 35

2.6 Appendix 5 – Cold treatment 35

2.7 Appendix 6 – Non host 35

2.8 Appendix 7 – Heat treatments 35

2.9 Appendix 8 – Not currently in use 35

2.10 Appendix 9 – Not currently in use 35

2.11 Appendix 10 – Field control programs 35

2.12 Appendix 11 – Winter window 36

2.13 Appendix 12 – Irradiation 36

SECTION 3 GROWER RESPONSIBILITIES 37

3.1 Summary 37

3.2 General requirements 38

3.3 Registration 38

3.4 Orchard responsibilities 38
3.4.1 Citrus growers 39
3.4.2 Avocado growers 39

3.5 Audits 39
3.5.1 Non Compliance 40
3.5.2 Packhouse Approved Arrangement systems 40
3.5.3 Security and supervision 41

SECTION 4 CROP MONITOR RESPONSIBILITIES 42

4.1 Registration 42

4.2 Audit 42

4.3 Non Compliance 42

SECTION 5 PACKHOUSE RESPONSIBILITIES 43

5.1 General requirements 43

5.2 Documentation 43

5.3 Delegation of exporter responsibilities 43
5.3.1 General 43
5.3.2 Security and supervision 44
5.3.3 Inspection 44

5.4 Audit 44
5.4.1 Non Compliance 45

5.5 Approved Arrangements – Packhouse 45
5.5.1 General requirements 45
5.5.2 Audit 46
5.5.3 Inspection requirements 46

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS 46

5.5.4 Documentation 47

5.5.5 Post treatment security 47

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES 49

6.1 General requirements 49

6.2 Registration 49

6.3 Audit 49
6.3.1 Non Compliance 49

6.4 Post treatment security 49
6.4.1 Registration 50
6.4.2 General requirements 50

6.5 Post treatment transportation 50

6.6 Treatment Appendices 51
6.6.1 Appendix 3 – Fumigation 51

Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES 51

6.6.2 Appendix 4 – Dimethoate 53

Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES 53

6.6.3 Appendix 5 – Cold treatment 55

Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS 55

6.6.4 Appendix 12 – Irradiation 56

6.7 Tablegrape fumigation requirements 58
6.7.1 General requirements 58
6.7.2 Treatment 59
6.7.3 Traceability 59
6.7.4 Additional precautionary measures 59

SECTION 7 EXPORTER RESPONSIBILITIES 60

7.1 General requirements 60

7.2 Exporter Inspection 60
7.2.1 Split Consignment Inspections 61

7.3 Documentation 61

7.4 Rejected Produce 62

7.5 Security of Produce 62

7.6 Audit 63
7.6.1 Non-compliance 63

SECTION 8 GOVERNMENT RESPONSIBILITIES 64

8.1 AQIS Canberra office 64
8.1.1 Manager - Plant Programs 64

8.2 AQIS State Offices 64
8.2.1 Registration requirements 65
8.2.2 Sampling requirements 65
8.2.3 AQIS inspection procedures 65
8.2.4 Consignment line samples 66
8.2.5 Rejection procedures 66

8.3 Audit 67
8.3.1 Audits after Product Rejections by AQIS 67

Table 6 – AQIS AUDIT FREQUENCY 67

8.4 Fruit Fly Area Freedom – State Departments 69
8.4.1 Validation of Area Freedom 69
8.4.2 Trapping 69

Attachment to Section 8.1 AQIS Plant Contact List 71

ATTACHMENT 1 - NEW ZEALAND PEST LIST 72
AVOCADO 72
BANANA 77
CAPSICUM 80
CITRUS 89
CUCUMBER 95
GRAPE 103
LYCHEE 111
MANGO 112
MELON 115
PAPAYA 123
PINEAPPLE 125
STRAWBERRY 129
TOMATO 132
WATERMELON 138
ZUCCHINI & SCALLOPINI 145

ATTACHMENT 2 - FORMS 149

2.1 APPLICATION FOR GROWER REGISTRATION 149
2.2 APPLICATION FOR REGISTRATION OF PACKHOUSE/FREIGHT FORWARDER/LOAD OUT FACILITY/ EXPORT INSPECTOR (DELEGATE) 150
2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION 151
2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 152
2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT 153
2.6 INSPECTION RECORD 155
2.7 FUMIGATION RECORD 156

2.8 COLD DISINFESTATION RECORD 158

2.9 WITHDRAWAL NOTICE 159
2.10 SUSPENSION NOTICE 160
2.11 DECLARATION OF DIMETHOATE TREATMENT 161

2.12 CONTAINER REPORT SHEET 162
2.13 AVOCADO GROWER DECLARATION 163
2.14 CUCURBIT GROWER DECLARATION 164

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AMENDMENT RECORD

Amendments to this manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	s. 22(1)(a)(ii)	18 June 1999
2		14 July 1999
3		27 April 2000
4		March 2001
5 5A 5B 5C		29 April 2002 March 2002 December 2004 January 2006
6 6A 6B		August 2006 August 2007 March 2011
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GLOSSARY OF TERMS

ANVAS	Avocado Nursery Voluntary Accreditation Scheme
AA	Approved Arrangement
AQIS	Australian Quarantine and Inspection Service
DAFF	Australian Government Department of Agriculture, Fisheries and Forestry
Dmin	The localized minimum absorbed dose within the process load
Dmax	The localized maximum absorbed dose within the process load
EXDOC	Electronic Export Documentation
EX28	Notice of Intention to Export/Export Permit
EX161	Inspection advice notice
EX186	Transfer Certificate
EX222	Approved Arrangement equivalent of EX28
ED	Exporter Delegate
Gray (Gy)	Unit of absorbed dose where 1 Gy is equivalent to the absorption of 1 joule per kilogram
IHS	Import Health Standards (New Zealand)
MAF	Ministry of Agriculture and Forestry (New Zealand)
MeV	Mega Electron Volt
MAP	Maximum Allowable Prevalence
NZ BQA	Australia-New Zealand Bilateral Quarantine Arrangement
PHYTO	Export conditions database.
RFP	Electronic Request for Permit

DEFINITIONS

AQIS Inspection	An inspection of any number of packages from one exporter from the same treatment pathway presented for inspection at one time.
Consignment line inspection	Inspection consists of commodities from a common treatment pathway. The inspection lot can be made up of different growers provided grower line inspections have been undertaken.
Grower line inspection	Inspection that must be performed prior to AQIS inspection and consists of one grower, one commodity and one treatment pathway.
Phytosanitary certificate	A certificate issued in accordance with Article V of the International Plant Protection Convention or at the request of a foreign country authority.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a hand).

INTRODUCTION

The New Zealand Bilateral Quarantine Arrangement (NZ BQA) is a formal agreement between the Australian Government Department of Agriculture Fisheries & Forestry and the New Zealand Ministry of Agriculture and Forestry (MAF), to ensure New Zealand's pre-export requirements are documented. This manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The NZ BQA details a series of treatment appendices that describe the requirements for a particular treatment for fruit fly host material. The structure incorporates developments in relation to the documentation of New Zealand Import Health Standards (IHS) on a commodity-by-commodity basis.

Scope of the Manual

This Systems Operation Manual (SOM) is designed to ensure;

- Only approved fruit fly host commodities are exported to New Zealand;
- Homogeneity of fruit fly host commodity consignments;
- Approved treatments for fruit fly host produce are used;
- Required levels and intensity of inspection of fruit fly host produce are maintained;
- Post treatment security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce;
- Trace back to grower/packer/treatment centre (as appropriate); and
- Accurate phytosanitary certification in accordance with New Zealand requirements

AQIS Regional Offices and State Departments of Agriculture (or equivalents) are to conduct management audits of the systems to ensure state responsibilities are being adequately performed and recorded.

This SOM gives instructions for audit procedures and maintenance of records that will be the responsibility of AQIS Regional Offices, and where applicable State Departments of Agriculture or their equivalents.

SECTION 1

1.1 Pest categories

MAF have commenced the re categorisation of pests as regulated and non-regulated pests. Certain regulated pests are deemed by MAF to be high impact pests which is divided into high impact fruit flies and high impact non fruit fly. High impact fruit fly categorisation is equivalent to the previous RG3 and high impact non fruit fly equivalent to RG2 pest categories.

As MAF review current IHS's the existing risk categories of RG1, RG2 and RG3 will be transcribed into the new categories. At this point in time only the litchi, mango, papaya, zucchini and banana pest lists reflect this new terminology.

1.1.1 Risk Group 3 (RG3) Pests

Are pests which upon entry into New Zealand would cause major market access disruption for a wide range of New Zealand commodities and/or have significant effects on environment or agricultural production. This group includes species of economically significant fruit flies.

These pests require treatment to be undertaken in Australia with documented procedures to ensure AQIS phytosanitary certification is accurate and auditable by MAF.

If this level pest is detected in New Zealand then the consignment will be re-exported or destroyed and the treatment pathway suspended until such time as an AQIS audit is conducted, and any associated corrective action is undertaken and results accepted by MAF.

1.1.2 Risk Group 2 (RG2) Pests

Are pests which upon entry into New Zealand could cause major market access disruption and/or have significant effects on environment or the agricultural production of a particular commodity.

These pests require some form of management practices to be undertaken (i.e. infield controls, area freedom, or post harvest treatments). An additional declaration to this effect must be made on the phytosanitary certificate.

If this level pest is detected in New Zealand the consignment will be re-exported, destroyed or where appropriate ordered for appropriate treatment. There will be no suspension of trade but a follow up AQIS audit will be conducted to determine cause of the system failure and associated corrective actions undertaken. AQIS may suspend specific commodity pathway until cause of failure is determined and corrective action undertaken.

1.1.3 Risk Group 1 (RG1) Pests

RG1 pests are those pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

These pests require no specific formal treatment or controls, AQIS will inspect for these pests at export inspection, if detected the consignment must be subjected to appropriate treatment/re-conditioning and represented for exporter/exporter delegate (ED) AQIS inspection.

If this level of pest is detected in New Zealand the consignment would be available to be re-conditioned, subject to appropriate treatment (if available), re-export or destroyed.

1.1.4 Non Regulated Pests

These pests have an unlimited tolerance during inspection and are regarded as non-actionable pests between Australia and New Zealand. It should be noted that excessive levels of non-regulated pests may interfere with AQIS inspection and may result in longer inspection times to ensure accurate identification.

1.1.5 Regulated Pests

Regulated pests are regarded as actionable pests between Australia and New Zealand. Actions would be undertaken if they were intercepted/detected. As well as quarantine pests, these include new organisms as defined by the New Zealand *Hazardous Substances and New Organisms Act 1996*, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants.

1.2 Maximum pest levels

Table 1 details inspection levels and tolerances that will ensure that a 95% confidence level that Maximum Allowable Prevalence (MAP) will not be exceeded.

The sample size must be selected/nominated by the exporter or exporter delegate prior to commencement of inspection and cannot be varied. This sample size must be maintained in all subsequent inspections, including AQIS export inspection.

Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weed seeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 - 2000	520	0	≤ 7	0
2001 - 3000	550	0	≤ 7	0
3001 - 4000	560	0	≤ 7	0
4001 - 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

1.3 Contaminates

Consignments contaminated with soil, or other potential carriers of quarantine pests (eg leaf litter) must not exceed tolerances listed below. The consignment may be reconditioned to remove the infestation. After reconditioning, the consignment must be re-inspected and may be exported if found free from infestation.

Consignment lines contaminated with soil in excess of 25g per 600 units shall be washed free of soil prior to release, re-shipped, or destroyed at the importers options and expense.

Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped, or destroyed at the importers option or expense.

SECTION 2 TREATMENT APPENDICES

2.1 Summary

The NZ BQA is divided into separate treatment pathways, called treatment appendices.

The appendices form the framework for the treatment of commodities for the species of economically significant fruit flies (RG3 pests).

The treatment appendices are treated as separate distinct pathways and as such commodities exported under the same treatment pathways may be inspected together at AQIS inspection. Commodities from separate treatment pathways may not be combined for inspection.

TREATMENT FRAMEWORK
(MARCH 2011)

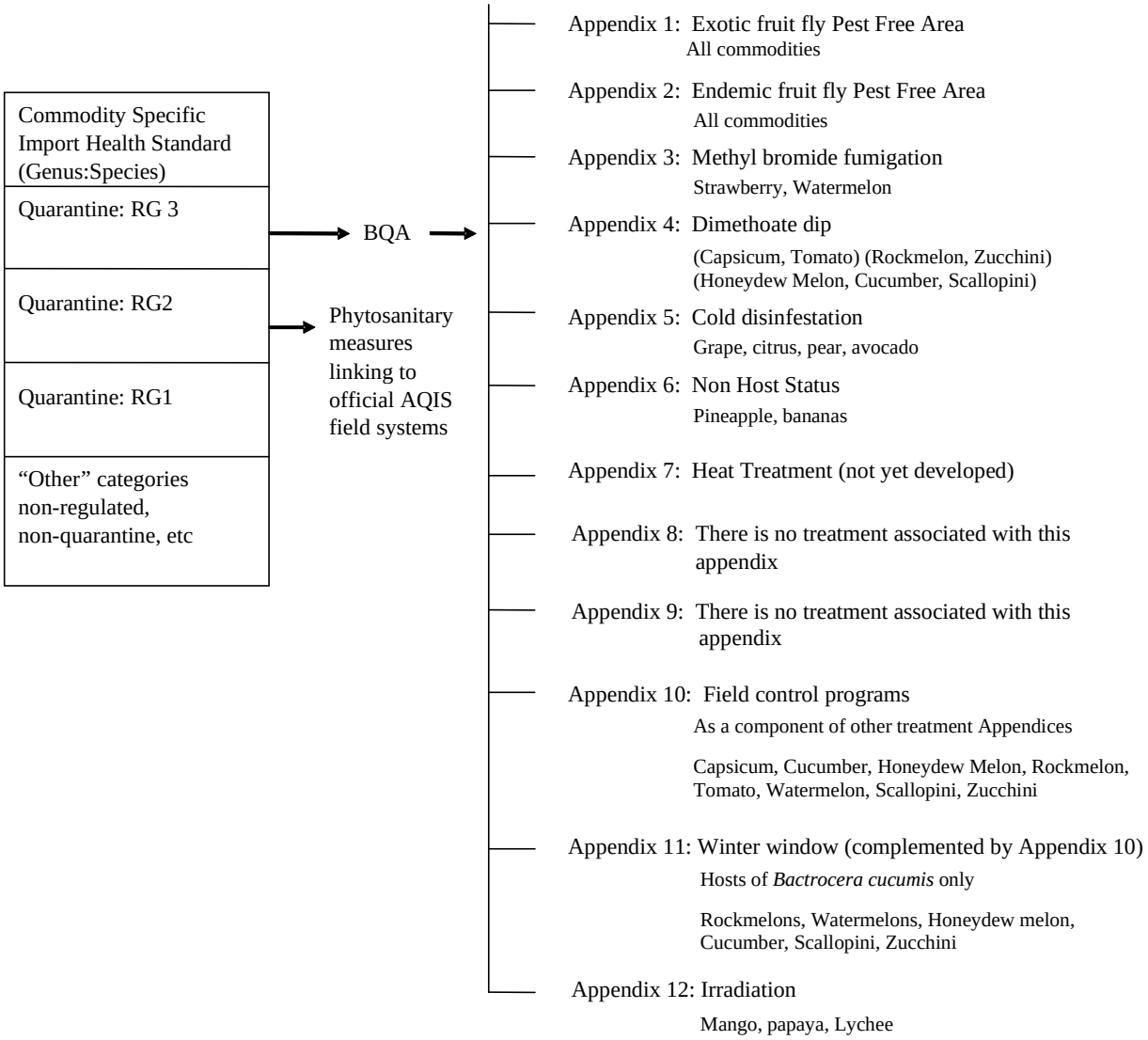


Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Avocado *Persea americana*	Area freedom *Appendix 2*	✓	✓		✓	✓	*EXDOC Endorsement No 1641* 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The avocadoes in this consignment have gone through appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia. **OR** *EXDOC Endorsement No 1582* 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Avocado *Persea americana*	Cold storage *Appendix 5* 1°C (±0.2°C) for 16 Days	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1649*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The avocadoes in this consignment have gone through appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia. **OR** ***EXDOC Endorsement No 1585*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Banana *Musa spp*.	Non-host status *Appendix 6*	*✓	*✓	*✓	✓	✓	***EXDOC Endorsement No 1783*** 1) The bananas have undergone appropriate pest control activities that are effective against Pink hibiscus mealybug (Maconellicoccus hirsutus), 2) The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significance in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS. OR ***EXDOC Endorsement No 1802*** 1) The bananas have been sourced from an area free (verified by an official detection survey) from Pink hibiscus mealybug (Maconellicoccus hirsutus), 2) The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significance in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS. *** Growers and packhouses need not be registered if in field controls are not being implemented for pink hibiscus mealybug. If this is the case, bananas must be fumigated prior to export. If fumigation is to occur, the treatment must be undertaken at a facility registered under the BQA.*
Capsicum *Capsicum annuum*	Area freedom *Appendix 2* * If fumigation to occur, grower need not be registered for control of *Lepidopteran* species.	*✓	✓		✓	✓	***EXDOC Endorsement No 1637*** 1) The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The capsicums in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. *** If growers are not controlling Lepidopterean spp (i.e. YPM) fumigation to be carried out prior to export.*

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT		REGISTRATION				ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
*Capsicum *Capsicum annuum*	Dimethoate ** Appendix 4 & 10* <u>spray</u> only at 400ppm and fruit must be sprayed for a minimum of one minute	*✓	✓	✓	✓	✓	***EXDOC Endorsement No 1642*** 1) The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The capsicums in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The capsicums in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** *If growers is not controlling Lepidopterean spp (i.e. YPM) fumigation to be carried out prior to export, "The Capsicums in this consignment have been Fumigated with methyl bromide at the rate of 32gm per cubic metre for 2 hours at 21℃ at a maximum of 50% chamber capacity"*
Citrus *	Area freedom *Appendix 2*	*	✓		✓	✓	***EXDOC Endorsement No 1638*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The citrus in this consignment have undergone appropriate pest control activities that are effective against Citrus black spot (*Guignardia citricarpa*), 3) The citrus in this consignment have been treated in accordance with Appendix 2 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** Nil grower registration required under area freedom appendix, as Citrus Black Spot is restricted to the state of Queensland.*

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Citrus *	Cold storage *Appendix 5* 1°C (±0.6°C) for 16 days Or 0°C or below for not less than 13 days	*✓	*✓	✓	*✓	✓	***EXDOC Endorsement No 1648*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The citrus in this consignment have undergone appropriate pest control activities that are effective against Citrus black spot (*Guignardia citricarpa*), 3) The citrus in this consignment have been treated in accordance with Appendix 5 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** Grower, packhouse, freight forwarder / load-out registration required only for the state of Queensland, where Citrus Black Spot occurs.*
Cucumber *Cucumis sativus*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1639*** 1) The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
*Cucumber *Cucumis sativus*	Dimethoate **Appendix 4 & 10* <u>dip only</u> 400ppm, fruit must remain submersed for one minute	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1643*** 1) The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The cucumbers in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Cucumber *Cucumis sativus*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1627*** 1) The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Grapes *Vitis vinifera*	Area freedom *Appendix 2*	✓	✓		✓	✓	***EXDOC Endorsement No 1574*** 1) The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The grapes in this consignment have been treated in accordance with Appendix 2 (Area freedom) of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 3) The grapes in this consignment have been treated for *Lactrodectus hasselti* (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, 4) The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis*, 5) The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccis hirsutus*.
Grapes *Vitis vinifera*	Cold storage *Appendix 5* 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1577*** 1) The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The grapes in this consignment have been treated in accordance with Appendix 5 (Cold storage) of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 3) The grapes in this consignment have been treated for *Lactrodectus hasselti* (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, 4) The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis*, 5) The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccis hirsutus*.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Honeydew *Cucumis melo*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1640*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Honeydew *Cucumis melo*	Dimethoate ** Appendix 4 & 10* <u>dip only</u> 400ppm, fruit must remain submersed for one minute	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1644*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Honeydew *Cucumis melo*	Winter Window ** Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1628*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Lychee *Litchi chinensis*	Irradiation *Appendix 12* 250 or 350 Gy			✓	*✓	✓	***EXDOC Endorsement No 2298*** 1) The Lychees in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS. ***** Registration required post treatment.
Mango *Mangifera indica*	Irradiation *Appendix 12* 250 or 350 Gy			✓	*✓	✓	***EXDOC Endorsement No 3287*** 1) The Mangoes in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS. ***** Registration required post treatment.
Papaya *Carica papaya*	Irradiation *Appendix 12* * 150 Gy	✓	✓	✓	✓	✓	***EXDOC Endorsement No 3425*** 1) The papaya in this consignment have undergone appropriate pest control activities that are effective against Yellow peach moth (*Conogethes punctiferalis*), 2) The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between New Zealand MAF and the Australian Quarantine Inspection Service. ** Grower and packhosue registration required for Yellow Peach Moth control, if papayas are irradiated at this rate.*
Papaya *Carica papaya*	Irradiation *Appendix 12* 250 Gy			✓	*✓	✓	***EXDOC Endorsement No 3425*** 1) The papaya in this consignment have undergone appropriate pest control activities that are effective against Yellow peach moth (*Conogethes punctiferalis*), 2) The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between New Zealand MAF and the Australian Quarantine Inspection Service. ***** Registration required post treatment.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Pears *Pyrus communis*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No. 1575*** 1) The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia.
Pears *Pyrus communis*	Cold storage *Appendix 5* 1°C (±0.6°C) for 16 days Or 0°C or below for not less than 13 days			✓	*✓	✓	***EXDOC Endorsement No. 1578*** 1) The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia. ***** Registration required post treatment.
Pineapple *Ananas comosus* (only smooth cayenne)	Non-host status *Appendix 6*					✓	***EXDOC Endorsement No 1579*** 1) The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Rockmelon *Cucumis melo*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1631*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Rockmelon *Cucumis melo*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1630*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The rockmelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Rockmelon *Cucumis melo*	Dimethoate *Appendix 4* <u>dip only</u> 400ppm,fruit must remain submersed for one minute			✓	*✓	✓	***EXDOC Endorsement No 1646*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** Registration required post treatment.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Scallopini *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1632*** 1) The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Scallopini *Cucurbita pepo*	Dimethoate **Appendix 4 & 10* <u>dip only</u> 400ppm, fruit must remain submersed for one minute	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1633*** 1) The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The scallopinis in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Scallopini *Cucurbita pepo*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1778*** 1) The scallopini in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 2) The scallopini in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 3) The scallopini in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Strawberry *Fragaria spp*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1573*** 1) The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The strawberries in this consignment have been treated in accordance with Appendix 2 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Strawberry *Fragaria spp*	Methyl bromide *Appendix 3* 48g/m^3 for 3 hours at a temperature of at least 15°C			✓	*✓	✓	***EXDOC Endorsement No 1576*** 1) The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The strawberries in this consignment have been treated in accordance with Appendix 3 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** Registration required post treatment.
Tomato *Lycopersicon csculentum*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1634*** 1) The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The tomatoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
* Tomato *Lycopersicon csculentum*	Dimethoate **Appendix 4 & 10* spray or dip at 400ppm Fruit must be sprayed or remain submersed for one minute.	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1645*** 1) The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The tomatoes in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Watermelon *Citrullus lanatus*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1635*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The watermelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Watermelon *Citrullus lanatus*	Methyl bromide Appendix 3 32g/m3 for 4 hours at a temperature of 21°C to 26°C	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1626*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The watermelons in this consignment have been treated in accordance with Appendix 3 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
* Watermelon *Citrullus lanatus*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1629*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The watermelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Zucchini *Cucurbita pepo*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1636*** 1) The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The zucchinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Zucchini *Cucurbita pepo*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓	✓	✓	✓	***EXDOC Endorsement No 3339*** 1) The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The zucchinis in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

2.2 Appendix 1 – Country freedom from fruit fly

MAF recognise Australia is free of several species of fruit fly of economic significance to New Zealand (based on MAF Biosecurity Authority Standard 128.03.07).

Australia's freedom status for these flies is maintained through quarantine restrictions and a national monitoring program. The monitoring program is managed by the Office of the Chief Plant Protection Officer (OCPPO) and consists of exotic fruit fly trapping and monitoring regimes conducted at international airports and seaports.

2.3 Appendix 2 – Area freedom districts within Australia

2.3.1 General requirements

Appendix 2 refers to economic species of fruit flies which are endemic to Australia for which, through trapping and monitoring regimes, area freedom for specific species of fly have been established. The areas listed below have been audited and accepted by MAF as complying with MAF Biosecurity Authority Standard 158.03.06.

Area freedom will be assumed, unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. One or more larvae or pupae are found in locally grown fruit; or
. Five male fruit flies are trapped within 1 km of each other, within a 14-day period; or
. A single female fly is trapped.

In this case, "Area Freedom" will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of MAF Biosecurity Authority Standard 158.03.06, the suspension period will be reduced to;

. one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site;

. Should 2 outbreak sites occur within 1 – 3 km of each other a 30km outbreak zone will be applied, the zone will be centred on a point mid-distance between two outbreaks.

State Departments of Agriculture (or equivalent) must report all fruit fly finds in the recognised zones to the AQIS Canberra office within 48 hours of detection and identification. This information will then be supplied to MAF at the earliest opportunity.

2.3.2 Approved area freedom districts

Districts approved by MAF are listed below.

Riverina – MIA

This area covers the horticulture growing districts along the Murrumbidgee River (as well as the township of Hillston on the Lachlan River), and includes (but is not excluded to) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrandera and Darlington Point and towns located between;

Area (b) is the Hillston District.

Area (c) is the Menindee District.

Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and areas between.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and areas between.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and areas between.

Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri,Barmera, Waikerie and areas between.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, the Shire of Mildura and areas between.

Area (i) the Mypolonga Township surrounds.

Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

The Ord River Irrigation Area – Western Australia

This area covers the Ord River Irrigation Area (ORIA) as outlined below. This is for Mediterranean fruit fly area freedom only.

Area (j) Ord River Irrigation Area (Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the townsite of Kununurra and north-west of the Ord River).

The Shepparton Irrigation Region (SIR)

Area (k) Production areas and townships of Cobram, Koonoomoo, Invergordon, Numurkah, Katandra West, Katamatite, Wunghnu, Tallygaroopna, Congupna,Merrigum, Kyabram, Lancaster, Girgarre, Stanhope, Tongala, Shepparton, Ardmona, Coomboona, Undera, Mooroopna, Arcadia, Kialla, Murchison, Toolamba, Tatura, Dhurringile, Yarroweyah, Strathmerton, Katunga, Echuca, Colbinabbin, Corop, Rochester, Lockington, Rushworth, Wyuna, Bunbartha, Barmah, Picola, Nathalia, Waaia, and Bearii and seasonal tomato production areas.

NOTE: **Should any stages of Risk Group 3 fruit fly (alive or dead) be found during AQIS or Industry inspections in Australia, AQIS will inform the relevant State Department of Agriculture of the detection. AQIS will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.**

Should any stages of Risk Group 3 fruit fly (either alive or dead) be found during MAF import inspections, area freedom certification will be suspended for all districts of Australia until an AQIS audit determines the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on results of the AQIS audit.

Should any stages of a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

2.4 Appendix 3 – Fumigation

This treatment pathway allows the export of watermelons and strawberries to New Zealand. Fruit must be subjected to Methyl Bromide fumigation.

Watermelons exported under this pathway must also comply with Appendix 10 which covers field control programs of fruit flies. Therefore strawberries and watermelons may not be combined for inspection.

Fumigation practices must also be carried out in accordance with the AQIS Methyl Bromide Standard – Verson 1.4.

The Standard contains details for effective fumigation procedures and can be found on the AQIS website. http://www.daff.gov.au/data/assets/pdf_file/0010/734464/mbr-standard.pdf and via the link on the Phyto database website.

2.5 Appendix 4 – Dimethoate

This treatment pathway allows the export of tomatoes, capsicums, zucchinis, rockmelons, honeydew melons, cucumbers, and scallopini to New Zealand. Fruit must undergo mandatory dimethoate treatment. For some commodities this appendix must be used in conjunction with Appendix 10 (field control programs).

2.6 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand.

2.7 Appendix 6 – Non host

This pathway deals with commodities which have been accepted by MAF as non-host of endemic Australian fruit flies. Pineapples of the **smooth cayenne variety** and bananas can be exported under this pathway.

Pineapples have been historically accepted as non-hosts to the fruit fly species of economic significance present in Australia.

Bananas are accepted as being non-hosts to the fruit fly species of economic significance present in Australia when in the unripe stage of maturity.

Bananas must be harvested, packed and exported in the unripe (i.e. mature green) stage to New Zealand. Consignments containing bananas at the colour break to full ripe stage will be rejected for export to New Zealand.

2.8 Appendix 7 Heat treatments

At this time there are no commodities permitted for export under this pathway.

2.9 Appendix 8 – Not currently in use

2.10 Appendix 9 – Not currently in use

2.11 Appendix 10 – Field control programs

The field control programs referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies.**

This appendix is intended to be used in combination with other appendices rather than as a stand alone treatment. For example, cucumber exports to New Zealand under the dimethoate dip treatment require both a post-harvest dip and pre-harvest field control program – a combination of both Appendix 4 and Appendix 10.

Treatment	**Commodity**
Appendix 3 - Methyl bromide fumigation	watermelon
Appendix 4 – Dimethoate	capsicum, scallopini, cumber honeydew melon, tomato
Appendix 11 – Winter window	rockmelon, honeydew melon, cucumber, watermelon, zucchini, scallopini

2.12 Appendix 11 – Winter window

A "winter window" access period has been negotiated between MAF and AQIS, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly). "Winter window" specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment. The access period is between **1 May and 31 August in any year** (arriving in New Zealand).

Rockmelons, scallopini, honeydew melons, zucchini and **cucumbers** can be exported under this appendix from areas recognised free from Mediterranean fruit fly. Currently areas recognised free of Mediterranean fruit fly are the Ord River Irrigation Area and the states of Queensland, New South Wales, Victoria, the Northern Territory, and Tasmania.

As cucumber fruit fly is the only RG3 pest listed for **watermelons,** this commodity can be exported under this appendix from all areas in Australia.

2.13 Appendix 12 – Irradiation

Mangoes, lychees and papayas may be exported under this treatment pathway.

The minimum treatment rate specified by MAF for mangoes and lychees exported from Australia is Dmin 250Gy. This minimum irradiation rate is deemed to be effective for those fruit flies and regulated arthropods within the commodity pest listings for mangoes and lychees (see Attachment 1).

An alternate minimum treatment rate of 350 Gy has also been approved for mangoes and lychees. The application of 350 Gy may be deemed as effective for arthropods not listed on the regulated mango and lychee pest lists but determined to be regulated by MAF. The effectiveness of 350 Gy for other regulated arthropods, will be subject to irradiation efficacy data for the pest intercepted. Collating this information could result in delays.

Should efficacy data not be on file for other regulated arthropods irradiated at 350 Gy, other corrective/treatment actions may need to be instigated prior to AQIS endorsing the consignment or MAF releasing the consignment should the pest interception be encountered upon arrival in New Zealand.

The minimum treatment rate specified by MAF for papaya exported from Australia is Dmin 150Gy. The 150 Gy treatment for papaya is accepted by MAF as an effective treatment for fruit fly pests. However if this rate is chosen then effective in field management practices must be undertaken for *Conogethes punctiferalis* (yellow peach moth) prior to export.

A treatment option for irradiation at 250 Gy is also available for papaya. The 250 Gy treatment option has been accepted by MAF as effective against those regulated arthropod pests listed specifically for papayas.
The Food Standards Australia & New Zealand (FSANZ) standard for irradiated tropical fruits has a Dmax of 1000Gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au

SECTION 3 GROWER RESPONSIBILITIES

3.1 Summary

Treatment Pathway	Commodity	Requirement
Appendix 2 Area Freedom	Avocadoes	Growers must register with AQIS to maintain field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Capsicum	Growers must register with AQIS for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Grapes	Growers must register with AQIS to maintain field controls for the RG 2 pest *Conogethes punctiferales*. AQIS will certify southern state grapes area free for the RG 2 pest *Maconellicoccus hirsutus*
	Other	Growers are not required to register with AQIS for export under this treatment.
Appendix 3 Fumigation	Strawberries	Growers are not required to register with AQIS for export under this treatment.
	Watermelons	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production
Appendix 4 Dimethoate	Capsicums	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production and also for the control of RG 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Cucumbers, Honeydews, Scallopinis, and Tomatoes	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 5 Cold Treatment	Avocadoes	Growers must register with AQIS to maintain field controls for the RG 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Citrus	Queensland growers must register with AQIS to maintain field controls for the RG 2 pest *Guignardia citricarpa* (citrus black spot). Other state departments survey for citrus black spot, negating the need for grower registration.
	Grapes	Growers must register with AQIS to maintain field controls for the RG2 pest *Conogethes punctiferales* (yellow peach moth). AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus (hibiscus mealybug).
Appendix 6 Non Host	Pineapples	Growers are not required to register with AQIS for smooth cayenne variety pineapples under this treatment. Growers must keep records verifying smooth cayenne parentage.
	Bananas	Growers are required to register with AQIS to maintain field controls for the high impact non fruit fly pest *Maconellicoccus hirsutus* (pink hibiscus mealy bug).Unless opting for mandatory fumigation.
Appendix 10 In field controls	All commodities	All commodities which require Appendix 10 (In field controls for fruit fly) must be registered.
Appendix 11 Winter window	Rockmelons, honeydew melons, cucumbers, watermelons zucchinis and scallopinis	Growers must register with AQIS under Appendix 11 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 12 Irradiation	Mango & Lychee	Growers are not required to be registered under this pathway
	Papaya	If exporters intend to irradiate at 150Gy growers must register for the control of the high impact non fruit fly pest *Conogethes punctiferales*.

3.2 General requirements

Growers of commodities requiring registration must maintain spray diaries and implement field hygiene requirements that demonstrate appropriate management and recording for those pests listed as RG2 and RG3 in the pest lists (Attachment 1).

3.3 Registration

Application for registration (Attachment 2.1) will be made to the AQIS office in the grower's region. To ensure there are no delays with processing and completing registrations it is recommended that applications be forwarded to AQIS no later than 6 weeks prior to export. Applications are processed in order of receipt; late applications may be subject to delays. Applications must include a property map identifying blocks on which the relevant NZ BQA commodities are grown.

Growers may apply direct to their regional AQIS office or to the packhouse they are supplying. Packhouses must forward any grower applications through to AQIS as soon as possible for inclusion on the regions “master” grower/packer list.

Once application for registration is received regional AQIS staff will organise a time to visit the property to conduct a preliminary audit. During the visit the inspector will ensure the grower(s) are aware of their responsibilities under the SOM, check relevant documentation eg spray diaries, conduct an inspection of the property (registered blocks), and will allocate a grower registration number.

Growers that have previously registered under this arrangement in the previous season without non conformance will not require an AQIS visit prior to export commencement. However, an audit must be performed early in the season.

NOTE: **In the above circumstance, growers MUST notify AQIS of their intent to commence export at least 6 weeks prior to export. Growers must provide evidence that required control measures have been carried out (eg spray diaries). If AQIS approval is granted, a time for an audit visit will be organised. Failure to comply with these directions may mean growers, irrespective of previous participation, will require an “initial audit” before being allowed to commence export.**

3.4 Orchard responsibilities

Growers must apply recommended field controls a minimum of 4 weeks prior to commencement of harvest. Field monitoring and spray diary records must be kept for all activities relating to registered blocks. The applicable grower declaration form (Attachments 2.13, and 2.14) for the product must be completed and accompany each consignment of product intended for export.

NOTE: the Queensland Department of Primary Industries (QDPI) previously issued a farm note (F76/DEC92) which detailed requirements for field control programs against infestation of *Bactrocera cucumis*, these constituted the minimum requirements for the control of fruit fly. This farm note is no longer in print but the requirements are still accepted by AQIS. Newer chemicals developed and registered for the control of fruit fly may be utilised. All spray programs to meet AQIS requirements must be carried out at the recommended label rates. All activities relating to field controls must be recorded and held on file for a 12 month period.

Growers are permitted to use the services of a state registered crop monitor. Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered grower. Records including spray regime and recommendations must be available to AQIS upon request.

NOTE: All cartons of produce must be marked with some form of grower and packhouse identification to enable traceback.

3.4.1 Citrus growers

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer) — however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the southern states of New South Wales, Victoria and South Australia are not specifically required to be registered for this program, monitoring and spray diaries must be kept.

3.4.2 Avocado growers

All avocadoes must be sourced from growers and blocks registered with an official tree certification scheme (such as the Avocado Nursery Voluntary Accreditation Scheme or relevant state departments) to ensure freedom from avocado sun blotch viroid and undergone appropriate pest control activities that are effective against or been sourced from an area free (verified by an official detection survey) from cercospora spot blotch (*Pseudocercospora purpurea).*

In addition to the standard grower requirements listed in Section 3.3, avocado growers must supply the following documented evidence for registration:

- grower maps to include indexed and non-indexed fruit;
- official verification of orchard freedom from sun blotch viroid;
- sterilisation procedures between indexed and non-indexed blocks;
- buffer zone/s between indexed and non indexed blocks (i.e. row spacing between blocks); and
- pruning procedures to prevent sun blotch viroid re-infestation (i.e. no foliage or fruit contact with soil or neighbouring avocado trees)

NOTE: Further details on avocado accreditation for sun blotch viroid can be sourced from the Australian Avocado Growers Association or State Government Departments of Agriculture (or equivalents).

3.5 Audits

AQIS will audit growers to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency*

Growers will receive an initial audit prior to season commencement (or early in export season if previously registered subject to conditions above) and one further audit during the season.

For tomatoes and winter window commodities, AQIS will undertake monthly audits of the property throughout the growing/harvesting season in the initial season (where substantial compliance is recorded then audit frequency will be reduced to 2 monthly intervals).

AQIS will conduct audits of registered growers throughout the growing/harvesting season. All audits of growers will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

NOTE: the AQIS audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure the requirements of the new treatment are being met, and to identify any problems or potential problems with implementing the treatment.

All AQIS audits will be "announced" giving the grower at least two days notice.

Unannounced monitoring audits may be conducted if they are deemed necessary by the Regional Export Manager. Unannounced monitoring audits are not chargeable unless major non-conformances are detected.

AQIS audits of grower responsibilities may be conducted simultaneously with packhouse and/or exporter audits.

NOTE: Where a grower elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

3.5.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A grower found to be not managing orchard/s in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

The timing of the follow up audit is dependent on the problem and its relationship to growing/harvesting of the current crop. AQIS inspectors will determine if follow up audits are required.

3.5.2 Packhouse Approved Arrangement systems

Where a packhouse has an Approved Arrangement (AA) with AQIS and is packing a commodity for which grower registration is required, the packhouse must register and audit growers in the following manner:

. on initial registration;
. following registration at least once during the growing season; and
. in subsequent seasons once during each growing season.

During AQIS auditing of AA establishments, a sample of registered growers will be reviewed for compliance with the requirements of the SOM. If a major non-conformance is detected, the suspension of the packhouse may be considered necessary as it is the packhouse that is responsible for ensuring compliance with AQIS/New Zealand requirements. AQIS audits of growers registered by the packhouse will be conducted on the following basis:

. in the initial year of registration – 5% of all growers;
. subject to compliance the previous year – 2½% of all growers;

. in non-conformances were detected at a previous audit – increase random selection of growers to 10% of all growers.

3.5.3 Security and supervision

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

SECTION 4 CROP MONITOR RESPONSIBILITIES

4.1 Registration

Crop monitors must register with AQIS (Attachment 2.4) to undertake crop monitoring duties for the NZ BQA.

A crop monitor will include in their application, details of relevant registered growers and the commodities covered.

4.2 Audit

Crop monitors will provide registered grower property records upon AQIS/MAF request. AQIS will perform random audits of each registered crop monitor at least once per year/season for each commodity field monitoring service provided. Audits will include randomly selected growers.

If three growers (minimum) are covered by the same crop monitor, and audits reveal substantial compliance, additional grower audits of the crop monitor may be waived by the Export Manager for that year/season.

All audits of crop monitors will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

Where a crop monitor elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect.

4.3 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A crop monitor found to be not managing responsibilities in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

SECTION 5 PACKHOUSE RESPONSIBILITIES

5.1 General requirements

Packhouses are required to maintain secure conditions for NZ BQA commodities and have documented systems in place to ensure grower identification and segregation is maintained.

All cartons must be marked with a standard trade description in accordance with the *Export Control (Plants and Plant Products) Orders 2005* and some form of grower and packhouse identification.

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, packhouses (where applicable) must be registered specifically for New Zealand. Application for registration (Attachment 2.2) will be made directly to AQIS regional offices.

5.2 Documentation

Packhouses are responsible for maintaining all documentation and must provide to AQIS the following upon request:

i. copy of AQIS endorsed packhouse registration form;
ii. list of growers registered with AQIS who supply to the establishment;
iii. where grower registration is a requirement, a copy of AQIS endorsed grower registration forms;
iv. receival/despatch records of produce from individual growers; and
v.

Export documentation will be held on file for 2 years (minimum) and are subject to AQIS/MAF audit.

5.3 Delegation of exporter responsibilities

5.3.1 General

Where a packhouse has been delegated exporter responsibilities in accordance with directions contained in the SOM, the packhouse must undertake and record all functions delegated to them. Delegated responsibilities may include:

. the security of cleared/treated produce whilst on premise;

. supervision of loading and unloading of all consignments into and out of the packhouse premise;

. clear identification of all New Zealand destined produce;

. documenting all incoming and outgoing produce intended for export under the NZ BQA; and

. inspections.

Packhouses will be audited to ensure requirements for these functions are known.

5.3.2 Security and supervision

The exporter delegate (ED) will arrange appropriate transportation of treated products to ensure no cross infestation or substitution can occur.
Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to Export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by AQIS.

5.3.3 Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand, a copy of grower line inspection records must be presented to staff at the time of AQIS inspection.

Exporter inspection may be undertaken at a packhouse when delegated. See Section 7.2 for more details about exporter delegate inspections. A packhouse inspection will satisfy requirements for an exporter inspection if performed by an approved ED. Inspections must be recorded (refer to Attachment 2.6) and retained for audit purposes. A copy of the inspection record must accompany the consignment to the AQIS inspection.

If the exporter (or exporter delegate) opts for AQIS to carry out a consignment line inspection, then copies of grower line inspection records must be presented to staff at the time of AQIS inspection.

5.4 Audit

AQIS will audit packhouses to ensure compliance with NZ BQA requirements. Details of these audits can be found in *Table 7 – Audit Frequency.*

Grower registers, staff training, completion and storage of records and security responsibilities will be audited by AQIS. Variance to audit requirements can be made at the discretion of the Export Manager.

AA packhouses will be audited for compliance with the NZ BQA as per the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP

All audits of packhouses will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

AQIS audits of packhouse responsibilities may be conducted simultaneously with grower and/or exporter audits.

NOTE: Where a packhouse elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

5.4.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A packhouse found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

5.5 Approved Arrangements – Packhouse

5.5.1 General requirements

The following activities must be undertaken by AA packhouses:

(a) All individual packages must include grower numbers or equivalent codes and packhouse numbers.

(b) Declared fruit fly free area packhouses must have a register of all growers' names and addresses and allocated grower numbers for all NZ BQA commodities.

(c) Should area freedom suspension zones be established, packhouses must be able to provide separate registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals are required to show procedures for identification, segregation and packing processes to ensure "area free" commodities cannot be contaminated whilst on the establishment and/or surrounds.

(d) It is recommended contingency plans are incorporated within quality manuals to address additional procedures required in the event of fruit fly outbreaks. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

(e) Packhouses not undertaking official disinfestation treatments and that do not have Risk Group 2 or 3 pests; will not need to include additional systems to their Quality Manuals.

(f) Packhouses with Risk Group 2 or 3 pests will need to ensure grower registration, commodity segregation; identification and inspections meet the NZ BQA. It is likely some quality manuals will need to be amended or have attached an appendix to meet the new export requirements for NZ BQA.

(g) To gain accreditation, five joint inspections will be undertaken with AQIS to assess the ability of packhouse staff to perform inspections in accordance with the directions contained in the SOM.

AA packhouse conducting "treatments" under the NZ BQA must be registered for this purpose in addition to normal registration requirements. Section 4.7 of the SOM outlines the requirements for Treatment Centres.

5.5.2 Audit

AA packhouses with NZ BQA responsibilities incorporated into their current Quality Manuals will be audited in conjunction with standard auditing requirements.

Those choosing to separate NZ BQA commodity responsibilities from other AA accreditation will have the two systems audited separately but within the usual audit schedules applying to the establishment.

Establishments with RG 2 pests will have a percentage of those registered growers audited to ensure compliance with the NZ BQA.

Packhouses who elect to register growers of commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. On initial registration,
. Following registration, at least once during the growing season; and
. Continual registration- once during each growing season.

For AQIS audits, registered growers will be randomly selected on the following basis;

. Initial year of registration - 5% of all growers registered by the packhouse
. Subsequent growing seasons- 2.5% of all growers registered by the packhouse (subject to compliance from previous year)
. Non-conformance at a previous audit -10% of all growers registered by the packhouse

Should a major nonconformance be detected at audit, the packhouses will be suspended from the New Zealand program immediately. Depending on the type of nonconformance, suspension from the AQIS AA may be considered. Such a decision will be made by the AQIS AA Contact Officer in conjunction with the State Regional Manager and Canberra Office.

5.5.3 Inspection requirements

AA packhouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted when the AA establishment has systems in place that;

. Address grower field controls (horticulture extension officers, reference to crop monitors etc.)
. Have some type of formal receival inspection records
. Have sorter and grader recording systems within the processing line.

In order to properly document inspections for NZ BQA commodities, AA packhouse will undertake “in-line” consignment inspections according to the following table;

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 3 sets out sampling regimes that can be applied as in-line process controls within an AA packhouse. The maximum continuous time run for New Zealand is a 24 hour process. It is extremely important this type of in-line process control is undertaken and recorded for each consignment run of NZ BQA commodities.

All in-line process controls (Table 3) must be undertaken by an AQIS Approved Inspector. Where inspections are performed as per Table 3, individual grower line inspections are not required.

During inspection, any fruits/vegetables that are soft, bruised or display rot spots will be cut to determine evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all produce cut will be recorded on the inspection sheets.

Packhouse can make up any type of sampling system based on Table 3. **However**, packhouse must document what regime is to be used before the initial production run and ensure the sampling regime is representative of the consignment/s being assembled.

Packhouse requirements pertaining to identification, segregation, security and records for all NZ BQA produce must be part of the Process Management System submitted for AQIS approval.

NOTE: Packhouses will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

5.5.4 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers will be included on all packages covered by the NZ BQA.

For produce being transferred intrastate or interstate, documentation will be required to ensure the receiving company and AQIS inspector can verify security and integrity of the consignment on arrival. A declaration to the following effect will be made on the “EX 222”or internal transfer note as follows:

"The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by MAF and specified tolerances have not been exceeded."

Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

5.5.5 Post treatment security

Where an AA packhouse has accepted exporter delegation for the security and loading supervision of NZ BQA commodities, the packhouse will nominate the person/s who will be responsible for carrying out and recording the following:

. The security of cleared/treated produce whilst on the premises

. Supervision of loading and unloading of all consignments into and out of the premises intended for export under NZ BQA

. Clear identification of all NZ BQA produce

. Documenting all incoming and outgoing produce intended for export to New Zealand

The exporter/ED will arrange appropriate transportation of certified NZ BQA products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of acceptance of duties on file.

For product not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export (Ex 28) and signed by an AQIS inspection officer.

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES

6.1 General requirements

Treatment centres must have documented systems of identification, segregation, process controls, post security treatment and supervision responsibilities.

All staff must be appropriately trained to carry out designated responsibilities.

6.2 Registration

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, all treatment centres must be registered (Attachment 2.3) specifically for New Zealand. Application for registration will be made directly to AQIS Regional Offices.

6.3 Audit

AQIS will audit treatment facilities to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency.*

Product identification, calibration, load out activity, completion and storage of records and security responsibilities will be audited by AQIS. Records pertaining to these aspects will be checked for accuracy at audit. Variance to audit requirements can be made at the discretion of the Export Manager.

All audits of treatment facilities will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

AQIS audits of treatment facility responsibilities may be conducted simultaneously with grower and/or exporter audits.

NOTE: Where a treatment centre elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

6.3.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A treatment centre found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

6.4 Post treatment security

6.4.1 Registration

The exporter must nominate, in their application for registration (Attachment 2.5), the person/s who will be responsible for carrying out and recording the following:

- security of treated produce whilst on the premises;
- supervision of loading and unloading of all consignments into and out of the premises;
- identification and segregation of consignments intended to be treated; and
- documenting all incoming and outgoing produce intended to be exported to New Zealand.

6.4.2 General requirements

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment

Staff loading containers will ensure minimum time delays in moving commodities from the secure area into container/s. Product should not be left in an unsecured environment for more than 15 minutes.

Approved security measures for transporting of produce will include either;

. Full shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet),

. Full enclosure of each pallet with shade mesh cloth with a maximum opening of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),

. Loading direct into panotech vans with units sealed by AQIS officers

. Cool storing unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product (except commodities treated under area freedom)

. Cool storing protected in secure packages at any temperature (except commodities treated under Area freedom)

Should any treatment operator/packhouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Export Manager for assessment and approval.

6.5 Post treatment transportation

The exporter/ED will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

Products transported to another destination for export loading must be subject to strict security provisions. The exporter/ED will ensure the transport medium is clean and other products (i.e. untreated/non-secure commodities), that could cause cross infestation are not loaded without taking appropriate security precautions. That is, either the other commodities are secured or the New Zealand produce is secured (as per Section 6.4.2).

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by AQIS.

NOTE: Export Managers may approve variations to the above documentation requirements to suit a particular state's operations. The use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is used, it is recommended audits be undertaken frequently to enable confidence within the systems.

Should inspecting officers find breaches to security during transit; consignments will be rejected. For some commodities reconditioning and re-inspection may occur.

AQIS will audit load out facilities to ensure compliance is being maintained.

6.6 Treatment Appendices

6.6.1 Appendix 3 – Fumigation

Fumigation practices must be carried out in accordance with the AQIS Methyl Bromide Standard – Verson 1.4. The Standard contains details for effective fumigation procedures and can be found on the AQIS website. http://www.daff.gov.au/data/assets/pdf_file/0010/734464/mbr-standard.pdf and via the link on the Phyto database website.

All fumigations must be performed with the amount of product space equal to or less than 50% of total air space within the chamber/tent. Fumigation treatment requirements are detailed in Table 4.

Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21 - 26°C and above	32g/m^3	Watermelon - 4 hours
15°C and above	48g/m^3	Strawberry - 3 hours

Treatment facilities must maintain documented systems. Systems will include:

1. Incoming product identification.
2. Segregation from other produce and clearly marked “New Zealand”
3. Treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment (i.e. batch numbers)
4. Treatment records
5. How measuring equipment is calibrated, how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.

It is recommended individual procedures accompanied by work instructions be written to define the processes and controls. The following criteria should be considered:

- Address how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent,
- Define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.
- How many units will be sampled to measure lowest flesh temperature of product?
- If tent fumigation is being performed, by whom and when is the tent checked for holes/tears?
- Who, how and when is temperature measuring equipment calibrated? How is this recorded?
- Where the in-process gas monitoring lines are located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?
- Who checks required fumigation dosage rate once temperature and volume are calculated?
- How is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?
- Who is responsible for checking the correct amount of fumigant is entered into the chamber/tent?
- What procedures are applied to ensure no leaks from the chamber or tent are evident?
- What period of time after initial fumigant is released into the chamber/tent will verification readings be made and using what type of equipment?
- Calibration of gas measuring equipment is undertaken how frequently and who does this?
- Calibration details are recorded where?
- At completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?
- Who has the authority to sign off the treatment certificates to enable release of produce?
- How is product identified as being treated?

NOTE: Regional Export Managers may approve variations to the above documentation requirements to suit a particular state's operating requirements.

6.6.1.2 AQIS Supervision

- Flexible tents- AQIS inspection staff will attend all fumigations being undertaken for NZ BQA. Inspection staff will attend either at commencement of fumigation or prior to completion. AQIS will verify treatment dosages, calculations and gas retention general process controls.

- Fixed capacity (chambers or fixed tents)-Treatment centres will be supervised at the commencement of the season, and then, providing substantial compliance is attained 2 - 3 times during the season.

Fumigation centres must advise their regional AQIS office 24 hours in advance of intended fumigation treatments. If AQIS is unable to attend at the required times, arrangements can be made to allow treatment to go ahead but define how AQIS will manage the supervision requirements.

NOTE: After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.2 Appendix 4 – Dimethoate
6.6.2.1 General requirements

Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES

Commodity	Dip strength	Tolerance	Dip/spray	Time
Tomato	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Tomato	400ppm	±6% (±24ppm)	Spray	Spray for at least 10 seconds, and remain wet for at least 1 minute
Capsicum	400ppm	±6% (±24ppm)	Spray	Spray for at least 1 minute
Zucchini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Rockmelon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Cucumber	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Scallopini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute

Note: The minimum tolerance for dimethoate sample results is 376ppm. Treatment centres will be suspended if samples fall below this level. Treatment centres will only be re-instated once an audit has been conducted to identify the cause of the low concentration. Adequate corrective actions must be documented and instigated by the treatment facility. Reinstatement will occur when AQIS has confirmed the adequacy of corrective actions and when AQIS is in receipt of aconforming dimethoate sample.

Treatment facilities must maintain documented systems. Systems will include:

- Chemical to must be used by expiry date;
- Chemical to be stored at temperatures below 40°C. It has been determined when temperatures rise above 46°C (for even 1 day), the active ingredient will degrade;
- That professional advice (laboratory/manufacturer) has been sought, if using any additives to solution, as these can accelerate the degradation of the active chemical concentrate over time;
- Procedure that ensures that pH levels are checked and adjusted if required, before adding chemical concentrate, as alkaline conditions have an adverse effect on the solution and will increase with time;
- All products will be free of soil;
- The treatment must be the last process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted;
- The treatment centre will nominate a person/s to prepare and record each consignment or batch lot;
- The treatment centre will prepare treatments immediately prior to use and have systems in place for recording solution strengths. The treatment centre will also record details of the mixing of solution and any topping up during processing which allows for chemical wash out. Details will include times and indicate volumes of product treated at the time of topping up.

Each treatment operator will be required to document their method/s of dipping and must include:

- Size of the dip tank

- Method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc)
- Maximum volume of water required for any/each treatment
- Amount of chemical needed to achieve the required ppm level active ingredient
- Minimum allowable solution level
- Maintenance of active ingredient level (i.e. "top up" levels)
- Treatment operators will have a system in place identifying treated and untreated products. Labels must be clear and visible on pallets/bins/crates etc
- After dipping, all products must be identified as being "treated".

NOTE: Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems demonstrating solution can be carried over without losing efficacy.

After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.2.2 Waxed produce

The application of waxes or oils prior to dimethoate treatment is prohibited. For treated produce, application of waxes or oils will only be allowed at the discretion of the Export Manager.

6.6.2.3 Sampling

Due to the range of commodities exported under this appendix and their seasonal availabitilty, all sampling regimes within the NZ BQA will be applied within the context of a calendar year (Jan – Dec).

All industry dip samples must be taken at the end of a dipping run. AQIS samples where possible (subject to operational constraints), will also be taken at the end of a dipping run. This will provide assurances that all product within the dipping process has been exposed to a solution within the required concentration.

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment. Analysis of chemical dipping strengths, must be verified according to the following sampling guidelines:

AQIS sampling

Initial year of registration: AQIS to be in attendance during the preparation of the first dipping solution. An AQIS dip sample will be taken from this first treatment run. AQIS dip samples must be taken during every month thereafter, while the treatment facility is dipping for export to New Zealand.

Continuous registration: Sampling may be extended to twice during dipping activities in a calendar year, provided that substantial compliance has been previously established.

Industry sampling – Monthly for the first 3 months of export activity, with one additional sample to be taken if the treatment period is greater than 4 months.

6.6.2.4 AQIS audit

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season.

. **First year of registration**

- Monthly during the treatment season.

. **Continuous registration without non-conformance**

- Twice during the treatment season.

6.6.3 Appendix 5 – Cold treatment

6.6.3.1 General requirements

Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS

Commodity	Temperature	Period
Pear, tablegrape, citrus fruits (option 1)	≤ 0°C	13 days
Pear, tablegrape, citrus fruits (option 2)	1°C (± 0.6°C)	16 days
Avocadoes	1°C (± 0.2°C)	16 days

Cold storage treatment facilities must maintain documented systems. Systems will include:

- Minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of product or less. For each additional 250 cu.m. of product, or part thereof, one additional pulp sensor will be used;
- Thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and available to AQIS;
- The warmest area of each cool storage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One pulp sensor will be placed at the warmest area of the coolstore. Further sensors will be placed throughout the load in locations representing different areas of the coolstore, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors;
- For operators of controlled atmosphere cool stores (pome fruits), records must be available which detail 16 continuous days of treatment at 1°C ± 0.6°C or 13 continuous days of treatment of 0°C or below during the storage period.

6.6.3.2 Temperature recording

- Continuous - strip charts or data log sheets for each cold treatment. Temperature recorders must be capable of monitoring pulp temperatures. Air temperature recorders are not acceptable.

- Intermittent - sensor temperatures will be manually recorded twice daily (morning and afternoon) for each cold treatment and verified once every 4 days by AQIS.

Temperature records will be retained and made available for auditing purposes by AQIS/MAF upon request.

NOTE: After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.3.3 Record requirements

Details to be recorded include:

- Date and results of sensor/probe calibrations
- Date chamber was loaded with produce
- Type and variety of produce treated, the quantity by lots involved, all to be identified by packhouse and exporter.
- Date the maximum pulp temperatures initially recorded 1°C ± 0.6° (or for avocado 1°C ± 0.2°C) and the date treatment concluded. Or, date the pulp temperature of the fruit within the chamber recorded 13 days at 0°/below or equivalent.
- Either continuous print out records or daily records of a.m. and p.m. temperatures within the chamber throughout the treatment program.
- Date produce was cleared from chamber with details of post treatment security and dispatch of produce.
- Date and results of re-calibration of sensors following completion of treatment.

6.6.3.4 AQIS supervision

AQIS will supervise calibration of sensors at commencement and completion of each cold disinfestation treatment.

Where the refrigeration unit is equipped with a print out recorder, AQIS will initiate treatment once the chamber has stabilised at the required temperature.

For cold storage centres using manual recording devices, AQIS inspection staff will supervise the disinfestation treatment every 3-4 days.

AQIS will verify and sign satisfactorily completed treatment records. Both AQIS and the treatment facility are to maintain copies of the treatments on file.

6.6.4 Appendix 12 – Irradiation

The minimum treatment rate specified by MAF for mangoes and lychees exported from Australia is Dmin 250Gy.

The minimum treatment rate specified by MAF for papaya exported from Australia is Dmin 150Gy. New Zealand MAFF requires Australia to undertake appropriate pest control activities for the *Conogethes punctiferalis* (yellow peach moth) if 150 Gy irradiation rate is applied.
A treatment option for irradiation at 250 Gy is also available for papaya. The 250 Gy treatment option has been accepted by MAF as effective against those regulated arthropod pests listed specifically for papayas.

Refer to Section 2.13 Irradiation Appendix of SOM for further information.

The Food Standards Australia & New Zealand (FSANZ) standard for irradiated tropical fruits has a Dmax of 1000gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au

Treatment centres will be required to carry out verification testing to determine the required response on target organisms has been achieved in accordance with International Standard Phytosanitary Measures (ISPM) # 18 - *Guidelines for the use of irradiation as a phytosanitary measure* (www.ippc.int). The records of this verification must be made available to AQIS/MAF upon request.

Ionizing radiation may be provided by radioactive isotopes (gamma rays from cobalt-60), electrons generated from machine sources (up to 10 MeV), or by x-rays (up to 5 MeV) (limits set by Codex Alimentarius). The unit of measurement for absorbed dose is gray (Gy).

Treatment procedures must ensure the minimum absorbed dose (Dmin) is fully attained throughout the commodity to provide the prescribed level of efficacy. Owing to the differences in the configuration of treatment lots, higher doses may be required to ensure the Dmin is achieved throughout the configured consignment or lot; these doses must not exceed the Dmax.
NOTE: After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.4.1 Dosimetry

Dosimetry ensures the required Dmin for a particular commodity was delivered to all parts of the consignment. The following conditions for dosimetry systems must be in place:

- Capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax)
- Calibrated in accordance with international standards or appropriate national standards (ISO/ASTM 51261 "Selection and Calibration of Dosimetry Systems for Radiation Processing", ISO/ASTM 51204 "Dosimetry in Gamma Irradiation Facilities for Food Processing" and ASTM guide - F1355 "Irradiation of Fresh Fruits as a Phytosanitary Treatment", and ISPM 18)
- Appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
- Evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
- Consider variations due to density and composition of the material treated, shape and size, orientation of the product, stacking, volume and packaging;
- Dose mapping of the product in each geometric packing configuration, arrangement and product density used during routine treatments must be carried out prior to the approval of the facility. Only configurations approved by AQIS can be used for actual treatments;
- All components of the dosimetry system must be calibrated according to documented standard operating procedures. An independent organisation recognized by AQIS should assess performance of the dosimetry system;
- An accurate measurement of absorbed dose in a consignment is critical for determining and monitoring efficacy and is part of the verification process. The required number, location and frequency of these measurements should be prescribed based on the specific equipment, processes, commodities, relevant standards and phytosanitary requirements.

6.6.4.2 Dose Mapping

- Dose mapping studies must be conducted to fully characterize the dose distribution within the irradiation chambers and commodity, and demonstrate the treatment consistently meets the prescribed requirements under defined and controlled conditions. Dose mapping data from a minimum of three runs on any particular configuration must be provided to AQIS for verification of Dmin points etc. A minimum of three runs in a physical configuration is required for verification of Dmin (standard).
- Dose mapping must be done in accordance with documented (proven) standard operating procedures. The information from the dose mapping studies is used in the selection of locations for dosimeters during routine processing.
- Independent dose mapping for incomplete (partially-filled) as well as first and last process loads is required to determine if the absorbed-dose distribution is significantly different from a routine load and to adjust the treatment accordingly.

6.6.4.3 Facility records and traceability

Treatment facility operators must keep and maintain records addressing the areas listed below.

- Appropriate treatment records for phytosanitary purposes must be kept by the irradiation facility to ensure traceability of treated lots. Records for every treatment must be kept.
- Dosimetry records must be kept by the treatment facility for at least one full year after treatment. Records must be made available to AQIS on request.

Records kept by treatment centres should also address the following:

- Identification of facility and responsible parties
- Purpose of treatment
- Target regulated pest(s)
- Lot size, volume and identification, including number of articles or packages
- Identifying markings or characteristics
- Quantity in lot
- Absorbed doses (target and measured)
- Date of treatment
- Observed deviations from treatment specification.

6.7 Tablegrape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti*

6.7.1 General requirements

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern.

MAF have directed AQIS to either undertake stringent field control programs to eliminate this pest or an agreed treatment effective against redback spiders. The Australian tablegrape industry has opted for mandatory fumigation using a sulphur dioxide - carbon dioxide treatment.

In addition to treatment centre registration, fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Treatment centres carrying out fumigations on tablegrapes must meet the general requirements outlined above for treatment centres and the listed criteria detailed in Section 6.5.1 of the SOM.

6.7.2 Treatment

The mandatory fumigation treatment for redback spiders is a **mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes**.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

AQIS inspection staff must sight fumigation treatment records to enable phytosanitary certification of tablegrapes.

6.7.3 Traceability

If a live redback spider is detected during inspection, systems must be in place to allow trace back to individual fumigation treatments.

6.7.4 Additional precautionary measures

Unused packaging carried over to the following season presents an additional pathway for the introduction of Redback spiders into New Zealand.

When carrying unused table grape packaging over, either pest-proofing or disinfestation of the packaging is necessary.

SECTION 7 EXPORTER RESPONSIBILITIES

7.1 General requirements

All exporters of NZ BQA products must be registered with AQIS. Exporter applications (Attachment 2.5) will be made to the appropriate regional AQIS Office.

Applications for registration will include details of the commodities and treatment pathways the exporter intends to use to meet with conditions stipulated in the SOM.

AQIS will accept the application if details of treatment centres are not known at the time, but exports of the particular commodities will not be permitted until relevant information is provided to AQIS.

Exporters are responsible for ensuring that all parties engaged as part of their export pathway, are registered by AQIS (where applicable) for specific purposes in accordance with the SOM.

Regional AQIS offices will endorse BQA registration forms once a registration status has been granted. The endorsed forms will be held by the issuing AQIS office, with a copy provided to the applicant.

Exporters engaging a BQA registered party, must have a copy of the endorsed AQIS registration form on file for auditing purposes. Failure by an exporter to engage an AQIS registered party for specific purposes in accordance with the SOM, may result in a suspension of their export registration status.

Exporters must ensure at all times either directly or by delegation:

. Product security during loading, transport and export consignment consolidation is not compromised and there can be no substitution or cross infestation of product following treatment.

. Exporter inspection requirements as detailed in the SOM are performed by qualified staff and records are kept for all inspections performed.

. Inspection records are given for each grower line presented for AQIS inspection.

. Liaison with AQIS/State Officers takes place as necessary to advise of product movement and inspection requirements,

. Documentation, including phytosanitary certificate endorsements are maintained.

7.2 Exporter Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand, with full details of the inspection to be recorded (Attachment 2.6). A copy of grower line inspection records must be presented to staff at the time of AQIS inspection.

Exporter inspections must be undertaken at an appropriate sampling rate, as given in *Table 1* of the SOM. Exporters need to ensure all staff they delegate inspection duties to, have been audited and approved by AQIS.

If the exporter (or exporter delegate) opts for AQIS to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of AQIS inspection.

During exporter inspections, any soft, bruised or rotted products will be cut to determine evidence of fruit fly infestation. Results of products cut will be noted on the inspection record. A copy of this record must be presented with the consignment for AQIS inspection. Inspection records together with other documentation relating to the consignment must be held on file for 2 years and is subject to AQIS/MAF audit.

All inspections, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10.

NOTE: Accredited AA establishments are not required to undertake end-point inspections if procedures enable a 600 unit in-line inspection and the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

7.2.1 Split Consignment Inspections

Following exporter/ED grower line inspections, exporters can elect an AQIS ‘consignment’ inspection even if the 'consignment' is to be split to varying destinations and differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any produce not forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: "Split consignment" procedures cannot be implemented until AQIS has approved the necessary documentation and record keeping systems.

Exporters/importers wanting to reduce MAF on arrival inspections of split consignments must adopt a system which fully documents the management procedures. Any procedure must include:

. Notification of consignment details to MAF as they occur.

. New Zealand communication links (importer and MAF contacts).

. Flow chart detailing how the phytosanitary certificate moves through the system.

7.3 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers, will be included on all packages covered by the NZ BQA.

A declaration to this effect will be made on the Notice of Intention to Export "Export Permit" (EX 28), EX186 (if appropriate), or in the Exporter Declaration/Comments box in an RFP as follows:

"The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by NZ MAF and specified tolerances have not been exceeded"

It is important that all phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX 28, the exporter must maintain a documented link to the Notice of Intention to Export (EX28). This system must be approved by the Regional Export Manager.

Trace back for consignments drawn from several RFP's is obtained through the EXDOC system.

7.4 Rejected Produce

If any stages of live fruit fly are found during an exporter/ED inspection, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other NZ BQA produce, and identified as not suitable for export to New Zealand.

The exporter or ED must immediately notify AQIS of the detection.

AQIS will formally advise and suspend the relevant treatment centre pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

Should during the exporter/ED inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS. The product must be identified as failed for export to New Zealand and segregated from all other NZ BQA products. Reconditioning of consignment may occur where applicable.

AQIS will formally advise and suspend the relevant grower pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the occurrence, reinstatement for the NZ BQA may be permitted.

The mutual fumigation recognition arrangement can be used when regulated pests are detected. This arrangement cannot be used as a pre-emptive measure. Please refer to PHYTO for more information (http://www.aqis.gov.au/phyto).

7.5 Security of Produce

Export shipping or airfreight containers will be inspected by a freight forwarding agent where delegated or exporter for cleanliness and condition (any openings in containers will be taped over).

Container inspections can be delegated to a container park. Persons carrying out inspections must be audited to ensure they are aware of their responsibilities. If inspections are carried out at a container park, copies of completed inspection records must be faxed (or sent with container documents) to point of loading and retained on file by both the container park and exporter/freight forwarder etc.

NOTE: It is only necessary to complete the "Container report sheet" for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

7.6 Audit

Exporters will undergo one audit per year. All relevant documentation for NZ BQA consignments must be made available to AQIS upon request. Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter inspections and documentation (i.e. RFP's, EX 186, EX28's and phytosanitary certificates).

Persons approved to act as an ED will undergo two audits per year. Audits will include documentation, knowledge of regulated pests, inspection techniques, sample selection and knowledge of relevant parts of the SOM.

NOTE: Where an exporter elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect.

7.6.1 Non-compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

An exporter found to be not managing responsibilities in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

SECTION 8 GOVERNMENT RESPONSIBILITIES

This section details the responsibilities associated for participants under the SOM to ensure requirements of the SOM are adhered to.

All systems will be subject to random audits by the AQIS Canberra office and MAF will audit systems at frequent intervals. The audits will include measurement of pathway compliance from growers (where required) through to final export container loading and associated documentation.

8.1 AQIS Canberra office

The AQIS organisation structure and management flow chart is provided at the end of this section. It is recommended that each AQIS Regional office develop its own organisation structure and management flow chart as it will apply to the management of the NZ BQA, and include this information for distribution within that state.

8.1.1 Manager - Plant Programs

Will be responsible for ensuring;

- All components of the SOM are being complied with consistently, over all commodities and treatments through all states.
- Regular audits of State Departments (where applicable) and AQIS systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the NZ BQA and that a proper record management system is available and easily accessible.
- AQIS Regional offices are conducting audits of AA as detailed in the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP and the requirements of the NZ BQA and this manual.
- Where non-conformances are found, that suitable corrective action is undertaken and verified by AQIS.
- Collate and circulate up to date national lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.
- That all amendments to this manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.
- That audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

8.2 AQIS State Offices

AQIS state offices, through the Regional Managers and Export Managers located in Queensland, New South Wales, Victoria, Northern Territory, Western Australia, Tasmania and South Australia are responsible for the following:

- The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM.

- Ensure all exporters, treatment centres, packhouse and growers (where applicable), are meeting the requirements of the NZ BQA and the directions contained in the SOM.
- Ensure inspection staff are trained in the terms, responsibilities and conditions for all NZ BQA commodities being exported from that state.
- Ensure all required components of the export pathways for commodities are registered for that state.
- Ensure audits (including internal audits), are being conducted at the correct frequency and the measurement of the system and corrective action where required, has been effected and recorded.
- Ensuring Canberra Office (Program Manager) is informed where any breaches of the conditions of this manual are observed.
- Ensuring all inspectors in their state, involved in the NZ BQA export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported in any district of Australia.
- Develop a system of recording registrations, and that such records are maintained so they are auditable.
- Ensuring the Canberra office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

8.2.1 Registration requirements

AQIS offices will implement a registration system where applicable for all growers, packhouses, treatment centres and exporters.

8.2.2 Sampling requirements

For the purpose of the treatments detailed in this manual the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

8.2.3 AQIS inspection procedures

Exporters will provide AQIS with exporter/ED inspection records prior to inspection. If all export documentation is not provided or incomplete, the consignment will not be inspected.

If the exporter (or exporter delegate) opts for AQIS to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of AQIS inspection.

Inspections performed by AQIS will be recorded on "Inspection Record - New Zealand" (Attachment 2.6)

NOTE: Alternative types of inspection records can be used as long as they contain the information supplied on the inspection record

AQIS inspectors must conduct inspections at the same sampling rate (Table 1) undertaken by the exporter/ED.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

Packaging must be checked during the inspection for compliance with the *Export Control (Plants and Plant Products) Orders, 2005* and requirements of the SOM.

NOTE: AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

8.2.4 Consignment line samples

Following exporter/ED inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines consist of commodities from a common treatment pathway (can be different growers).

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. The following points may be taken into account in determining selection of sample cartons:

- From the grower submitting the largest grower line within the consignment.
- From the commodity comprising the greatest quantity in the consignment line.
- At least one carton from the commodity seen to present the greatest quarantine risk.
- At least one carton from any known "poorer" performing growers/packers or from a newly registered grower or packer.

Consignment lines passed after AQIS inspection will be identified as "Passed for New Zealand" and immediately segregated. It is recommended exporters implement a system (i.e. stickers on pallets) to make identification of passed consignments easier.

8.2.5 Rejection procedures

A rejection upon inspection by AQIS of either a consignment or grower line does not necessarily indicate a packhouse or grower has breached the conditions of the NZ BQA. However the rejection does indicate a possible problem within the packer/exporter system and will be recorded.

All rejections are to be recorded on AQIS Form Ex 161 (Inspection Advice) and must detail the grower, packer and export pathway through which the commodity has passed.

Exporters/EDs who fail two inspections in any one season must be audited immediately. This will ascertain any reasons AQIS may consider necessary for suspension or corrective actions to be undertaken.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for RG3 pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of "Area Freedom," all districts in that state are suspended. Audit/s must be undertaken at the earliest opportunity.
- Any rejection for RG2 pests – AQIS Canberra office to be informed immediately to consider if audit of grower, packer, exporter or ED is necessary. This may depend on type and quantity of infestation detected. If applicable, the exporter can choose to undertake corrective action (i.e. treatment, withdrawal of the offending grower). Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for AQIS inspection.

- Any rejection for RG1/regulated pests - The consignment can be totally withdrawn or corrective action undertaken. Corrective action can include treatment, withdrawal of the offending grower. Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for AQIS inspection.

8.3 Audit

AQIS inspection staff will conduct audits of applicable growers, packhouse, treatment centres, exporters and exporter's delegates to ensure compliance with relevant section of this manual.

8.3.1 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

- Exporter/delegate inspection records.
- Grower pest monitoring records and pest control diaries (commodity specific).
- Packer training and associated pest identification.
- General hygiene of premises.
- Segregation and identification of produce.
- Staff responsibilities,
- Exporter or exporter's delegate inspection procedures and pest/weed identification skills.

Should auditing fail to identify any breach of the NZ BQA and responsibility of the SOM, all parties will be reinstated.

Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the Export Manager who will co-ordinate necessary action and advise all parties at the earliest opportunity.

Copies of any audit will be given to the relevant components of the pathway audited and kept on file.

Inspectors undertaking these audits must be appropriately trained and accredited.

Table 7 - AQIS AUDIT FREQUENCY

	Initial Year of registration	**Continuous Registration**	**Winter Window**
Grower	Initial audit prior to export + One additional audit during export period within calendar year *** Tomatoes** – Initial audit prior to export + monthly audits of property & spray diaries	One audit early in new export period (no initial audit required) *** Tomatoes** – Initial audit prior to export, extending to 2 monthly if substantial compliance is shown	Monthly audits of property & spray diaries * Audits extended to 2 monthly if substantial compliance is shown
Packer	Initial audit prior to export + One additional audit during calendar year	Minimum one audit annually	
Treatment Centre	Monthly audits required in first year **Dimethoate** - One initial audit during the first 10 days of season + monthly audits for remainder of calendar year whilst conducting treatments	**Fumigation** - One annual audit in first 10 days of export period (to be conducted during a treatment) + 2-3 times during remainder of treatment period within calendar year **Cold Storage** – One annual during first 3 treatments **Dimethoate –** Two audits per calendar year if substantial compliance is shown	
Exporter Delegate	Initial audit prior to export + One additional audit during remainder of calendar year	Minimum two audits per year If fail at two AQIS end point inspections, immediate audit required	
Exporter	One audit Annually	One audit Annually	
Crop monitor	One Audit Annually	One audit Annually	

8.4 Fruit Fly Area Freedom – State Departments

State Departments are responsible for the following:

- Where required, ensure the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual state management plans (as submitted to MAF), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of MAF Biosecurity Authority Standards 158.03.06 and 158.03.07 and
- Report any detections of economically significant fruit fly species found within trapping grids to AQIS Canberra Office within 24 hours of identification.

8.4.1 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. The procedures and controls are documented such that they can be readily demonstrated to, and audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of fruit flies and managed under the tri-state agreement between the states of New South Wales, Victoria and South Australia and:

. Reflect the requirements of New Zealand MAF Biosecurity Authority Standard 158.03.06., the
Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

. Management and control procedures for each area which have been accepted by MAF as meeting all the requirements (or equivalence) with the MAF Biosecurity Authority Standard 158.03.06.

. State Departments must advise AQIS Canberra Office of any amendments to their management procedures at the earliest opportunity. Canberra Office will forward amendments to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (minimum annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable MAF Biosecurity Authority Standard 158.03.06.

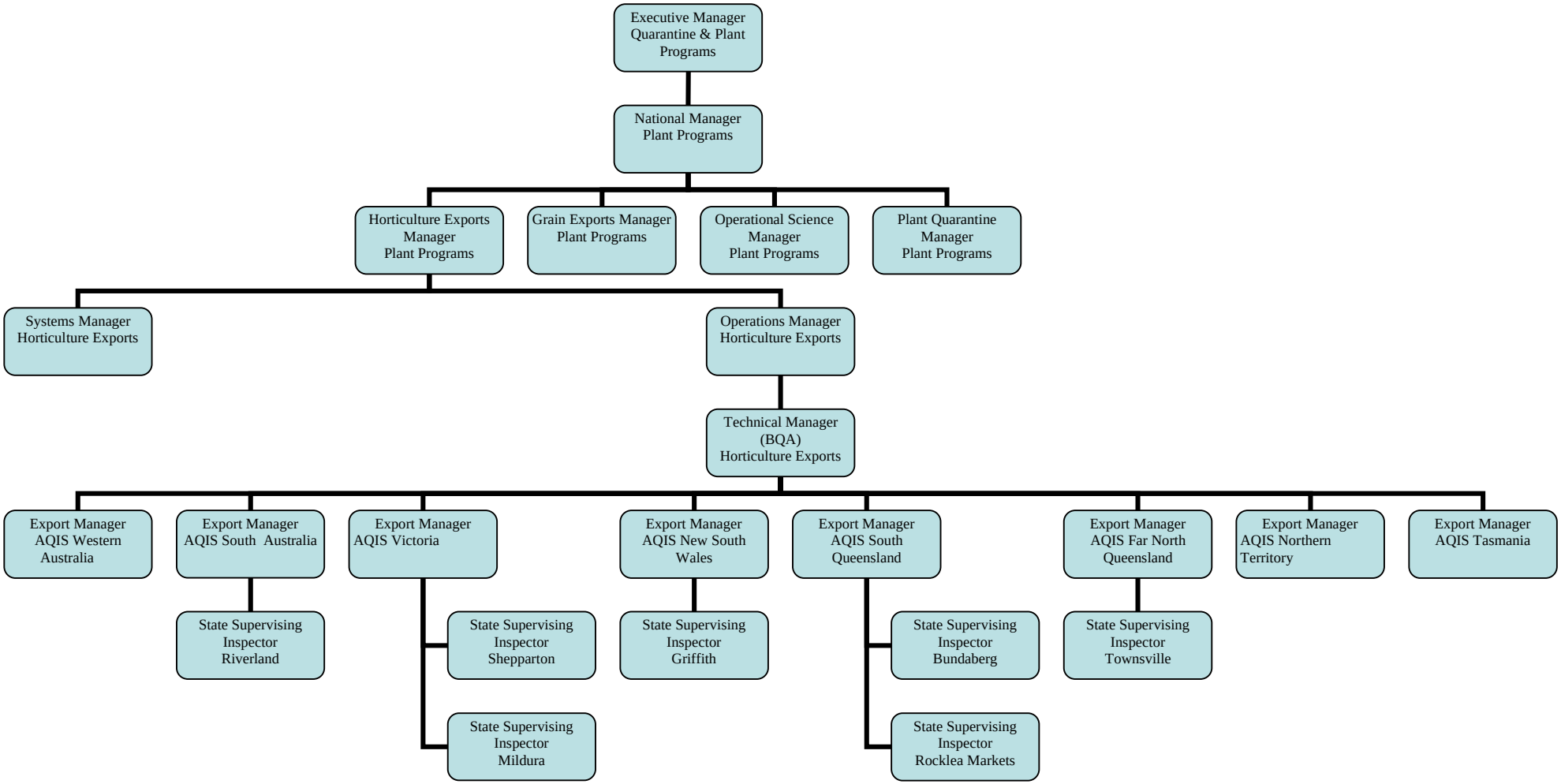
8.4.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

Attachment to Section 8.1 AQIS Plant Contact List



ATTACHMENT 1 - NEW ZEALAND PEST LIST

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under Appendices 2 (Area Freedom) and 5 (cold storage disinfestation) to the NZ BQA.

Growers and packhouse must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

- avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600-unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale

Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Mite	

Arachnida
Acarina
Tarsonemidae
Polyphagotarsonemus latus broad mite
Tetranychidae
Eotetranychus sexmaculatus sixspotted mite
Tetranychus urticae twospotted spider mite

Fungus

Ascomycota
Dothideales
Botryosphaeriaceae
Botryosphaeria dothidea
(anamorph *Fusicoccum aesculi*)
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana ear rot
(anamorph *Botrytis cinerea*)

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Lasiodiplodia theobromae stem-end rot
Unknown Coelomycetes
Unknown Coelomycetes
Colletotrichum acutatum -

Non-regulated non plant pests/organisms

None

BANANA
Musa

Bananas can be exported to New Zealand under Appendix No. 6 – Non Host of the NZ BQA.

Growers and packhouses need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a regulated pest until official categorisation has been determined by AQIS/MAF.

***Maconellicoccus hirsutus* (pink hibiscus mealybug) is listed for bananas, and AQIS can certify freedom from this pest based on the following:**

Maconellicoccus hirsutus

1. In field controls for *Maconellicoccus hirsutus* species are a requirement of grower registration, as such pink hibiscus mealybug will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Maconellicoccus hirsutus* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

3. Pre-export inspection of fruit will identify the presence of *M. hirsutus*, and the fruit would be rejected for export to New Zealand.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Cercospora hayi	diamond spot
Chaetothyrina musarum	sooty blotch
Cladosporium spp.	cladosporium mould
Glomerella cingulata var. *minor (*anamorph *Collectotrichum gloeosporioides* var. *minor)*	anthracnose
*Guignardia musae (*anamorph *Phyllosticta musarum)*	freckle
Phytophthora palmivora	black rot
Ramichloridium musae	freckle
Aleurodicus dispersus	spiralling whitefly
Amblypelta lutescens	fruit spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Araecerus coffeae	coffee bean weevil
Aspidiotus destructor	coconut scale
Atherigona orientalis	muscid fly
Bactrocera bryoniae	**fruit fly** #
Bactrocera musae	**banana fruit fly** #

Bactrocera cucumis	**cucumber fruit fly** #
Bactrocera frauenfeldi	**fruit fly** #
Bactrocera jarvisi	**jarvis' fruit fly** #
Bactrocera neohumeralis	**lesser Queensland fruit fly** #
Bactrocera tryoni	**Queensland fruit fly** #
Ceratitis capitata	**Mediterranean fruit fly** #
Chaetanaphothrips signipennis	banana rust thrips
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Cnaphalocrocis medinalis	rice leaf folder
Dirioxa pornia	Island fruit fly
Dysmicoccus brevipes	pineapple mealybug
Elixothrips brevisetis	banana rind thrips
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Ferrisia virgata	striped mealybug
Geloptera miracula	chyrsomelid beetle
Haplothrips gowdeyi	black flower thrips
Helicoverpa assulta	cape gooseberry budworm
Hemiberlesia palmae	citrus black scale
Icerya aegyptiaca	Eygyptian fluted scale
Icerya seychellarum	Seychelles scale
Isotenes miserana	orange fruit borer
Leptoglossus gonagra	squash bug
Maconellicoccus hirsutus	**pink hibiscus mealybug #**
Melanitis leda ismene	Rice butterfly
Monolepta australis	red-shouldered leaf beetle
Opogona glycyphaga	sugar-cane bud moth
Orgyia australis	vapourer moth
Pentalonia nigronervosa	banana aphid
Pinnaspis strachani	hibiscus snow scale
Planococcus citri	citrus mealy bug
Planococcus minor	passionvine mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rhyparida discopunctulata	leaf beetle
Spodoptera exigua	beet armyworm
Thrips florum	flower thrips
Thrips hawaiiensis	banana flower thrips
Tiracola plagiata	banana fruit caterpillar
Tirathaba rufivena	fruit borer
Unaspis citri	citrus snow scale
Xenothictis sciaphila	tortricid
Brevipalpus lewisi	bunch mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	vegetable spider mite

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Erwinia carotovora	bacterial soft rot
Aspergillus flavus	aspergillus storage rot
Aspergillus niger	aspergillus rot
*Ceratocystis paradoxa (*anamorph *Thielaviopsis paradoxa)*	ceratocystis rot
Colletotrichum musae	anthracnose
Deightoniella torulosa	black tip
Fusarium pallidoroseum	fusarium rot
*Glomerella cingulata (*anamorph *Colletotrichum gloeosporioides)*	anthracnose
Lasiodiplodia theobromae	fruit and stem-end rot
*Magnaporthe grisea (*anamorph *Pyricularia grisea)*	Johnson's spot
Sclerotinia sclerotiorum	cottony rot
Agrotis ipsilon	greasy cutworm
Aonidiella aurantii	California red scale
Aphis gossypii	cotton aphid
Araecerus fasciculatus	coffee bean weevil
Aspidiotus nerii	oleander scale
Chrysodeixis eriosoma	green garden looper
Coccus hesperidum	brown soft scale
Hemiberlesia cyanophylli	cyanophyllum scale
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Hercinothrips bicinctus	banana silvering thrips
Hermetia illucens	black soldier fly
Listroderes difficilis	vegetable weevil
Pseudococcus longispinus	longtail mealybug
Rhopalosiphum maidis	corn leaf aphid
Spodoptera litura	cluster caterpillar
Brevipalpus californicus	bunch mite
Polyphagotarsonemus latus	broad mite
Tetranychus lambi	strawberry spider mite
Tetranychus urticae	twospotted spider mite

# Denotes high impact pest

CAPSICUM
Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendices 4 (dimethoate treatment) and 10 (field control programmes) to the NZ BQA/IHS.**

A number of Risk Group 2 pests are listed for capsicums, and AQIS can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. bryoniae* should it occur.
4. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. If by chance *B. tabaci* were present on harvested capsicum fruit as a hitch-hiker, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
5. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
6. Historical records show that *B. tabaci* has never been detected on capsicum fruit during AQIS pre-export inspection.

Conogethes punctiferalis

1. In field controls for *Lepidopteran* species are a requirement of grower registration, as such YPM (Yellow Peach Moth) will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Lepidopteran spp* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

Thrips palmi

1. If *T. palmi* were present on harvested capsicum fruit, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on capsicum fruit during AQIS pre-export inspection.

Monilinia fructigena

1. This fungus does not occur in Australia.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
*Bactrocera kraussi**	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly

Homoptera
Aleyrodidae
Bemisia tabaci [vect]
Lepidoptera
Pyralidae
Conogethes punctiferalis — yellow peach moth
Thysanoptera
Thripidae
Thrips palmi [vect.] — palm thrips

Fungus

Ascomycota
Leotiales
Sclerotiniaceae
Monilinia fructigena — European brown rot
(anamorph *Monilia fructigena*)

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta
Coleoptera
Coccinellidae
Epilachna vigintioctopunctata — 28-spot ladybird
Curculionidae
Listroderes difficilis — vegetable weevil
Tenebrionidae
Gonocephalum carpentariae — false wireworm
Diptera
Muscidae
Atherigona orientalis — muscid fly
Tephritidae
Dirioxa pornia — island fruit fly
Hemiptera
Lygaeidae
Nysius vinitor — Rutherglen bug
Pentatomidae
Plautia affinis — green stink bug
Pyrrhocoridae
Dindymus versicolor — harlequin bug
Rhopalidae

Leptocoris mitellatus — leptocoris bug
Homoptera
Aleyrodidae
Aleurodicus dispersus — spiralling whitefly
Trialeurodes vaporariorum [strain] — greenhouse whitefly
Cicadellidae
Austroasca viridigrisea — vegetable leafhopper

Coccidae	
Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale
Diaspididae	
Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Nectria haematococca var. *brevicona*	dry rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata f. sp. *lycopersici*	-
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *vasinfectum*	fusarium wilt
Pythiales	

Pythiaceae

Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak

Virus

-

-

-

tobacco leaf curl bigeminivirus [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Weed

Angiospermae

Asterales

Asteraceae

Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf
Xanthium spp. (except *X. spinosum*)	bur

Caryophyllales

Amaranthaceae

Amaranthus spp.	amaranthus

Geraniales

Zygophyllaceae

Tribulus spp.	caltrop

Poales

Poaceae

Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass

Solanales

Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta
- **Coleoptera**
  - **Curculionidae**
    - *Listroderes costirostris* — vegetable weevil
    - *Listroderes obliquus* — vegetable weevil
- **Hemiptera**
  - **Pentatomidae**
    - *Nezara viridula* — green vegetable bug
- **Homoptera**
  - **Aleyrodidae**
    - *Bemisia argentifolii* — poinsettia whitefly
  - **Aphididae**
    - *Aphis craccivora* — cowpea aphid
    - *Aphis gossypii* — cotton aphid
    - *Myzus persicae* — green peach aphid
  - **Coccidae**
    - *Saissetia coffeae* — hemispherical scale
  - **Pseudococcidae**
    - *Pseudococcus longispinus* — longtailed mealybug
- **Lepidoptera**
  - **Noctuidae**
    - *Agrotis ipsilon* — greasy cutworm
    - *Chrysodeixis eriosoma* — green garden looper
    - *Helicoverpa armigera* — tomato fruitworm
    - *Spodoptera litura* — cluster caterpillar
  - **Gelechiidae**
    - *Phthorimaea operculella* — potato tuber moth
  - **Pyralidae**
    - *Sceliodes cordalis* — poroporo fruit borer
- **Orthoptera**
  - **Gryllidae**
    - *Teleogryllus commodus* — black field cricket

Mite

Arachnida
- **Acarina**
  - **Eriophyidae**

Aculops lycopersici — tomato russet mite
  - **Tarsonemidae**
    - *Polyphagotarsonemus latus* — broad mite

  - **Tetranychidae**
    - *Tetranychus ludeni* — bean spider mite
    - *Tetranychus urticae* — twospotted spider mite

Fungus

Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli*)	phomopsis stem rot
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phoma destructiva	bulb rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose

Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Bacterium	
-	
-	
Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	
A*grobacterium tumefaciens*	crown gall
Weed	
Angiospermae	
Asterales	
Asteraceae	
Galinsoga parviflora	
Sonchus spp.	sowthistle
Poales	
Poaceae	
Echinochloa spp.	grasses
Eleusine indica	goose grass

Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug

Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth

Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm

Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non-plant pests/organisms

None

CUCUMBER
Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme),**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for cucumbers. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested cucumber fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested cucumber fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspections of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the NZ BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Cucumbers exported to New Zealand under appendix 4 and 10 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.

3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	

Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	
Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	

Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida
Acarina
Acaridae
Tyrophagus dimidiatus — mushroom mite
Tetranychidae

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota
Unknown Ascomycota
Hyponectriaceae
Monographella cucumerina (anamorph *Microdochium tabacinum*) — --

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Cladosporium cucumerinum — --
Moniliaceae
Verticillium albo-atrum [severe strain] — progressive wilt
Tuberculariales
Tuberculariaceae
Fusarium oxysporum f. sp. *melonis* — --

Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot

Zygomycota: Zygomycetes
Mucorales
Choanephoraceae
Choanephora cucurbitarum — blight

Virus
-
-
-

tobacco ringspot nepovirus [strain] [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid

Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi	fusarium rot

(anamorph *Fusarium fujikuroi*)	
Gibberella gordonia	mould
(anamorph *Fusarium heterosporum*)	
Gibberella intricans	root and stem dry rot
(anamorph *Fusarium equiseti*)	
Gibberella zeae	mould
(anamorph *Fusarium graminearum*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	grey mould
(anamorph *Botrytis cinerea*)	
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria	--
(anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	sour rot
(anamorph *Geotrichum candidum*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	rhizoctonia rot
(anamorph *Rhizoctonia solani*)	
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tubercularіales	

Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of Sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Growers and packhouse must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk Group 2 pests *Conogethes punctiferalis*. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest *Maconellicoccus hirsutus*.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name
Insect	

Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug

Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail
Fungus	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	-
Coniella diplodiella	white rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	

Alternaria vitis	leaf disease
Cladosporium viticola	cladosporium leaf spot

Weed
Angiospermae
Asterales
Asteraceae

Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except *X. spinosum*) [contaminant]	bur

Geraniales
Zygophyllaceae

Tribulus terrestris [contaminant]	caltrop

Poales
Poaceae

Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass

Solanales
Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae

Latrodectus hasselti	Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	

Frankliniella occidentalis	western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite
Arachnida
Acarina
Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tenuipalpidae

Brevipalpus californicus	bunch mite

Tetranychidae

Panonychus ulmi	European red mite
Tetranychus urticae	twospotted spider mite

Mollusc
Gastropoda
Stylommatophora
Helicidae

Helix aspersa	common garden snail

Fungus
Ascomycota
Diatrypales
Diatrypaceae

Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback

Dothideales
Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker

Elsinoaceae

Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose

Mycosphaerellaceae

Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot

Erysiphales
Erysiphaceae

Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew

Leotiales
Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot

Phyllachorales
Phyllachoraceae

Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	-
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	-
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	-
Digitaria violascens [contaminant]	-
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass
Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	-
Pennisetum macrourum [contaminant]	African feather grass
Solanales	
Solanaceae	

Lycium barbarum [contaminant]	boxthorn
Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

LYCHEE
Litchi chinensis

Lychees can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Additional Declaration

Option1 *EXDOC Endorsement No 2298*

1) The Lychees in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS.

Regulated Pest List Commodity Sub-class: Fresh Fruit/Vegetables *Litchi chinensis* from Australia

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Amblypelta lutescens	Banana spotting scale
Amblypelta nitida	Fruit spotting scale
Bactrocera jarvisi	Jarvis fruit fly
Bactrocera neohumeralis	Lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceroplastes rubens	Pink/red wax scale
Cryptophlebia ombrodelta	Seychelles scale
Ischnaspis longirostris	Black thread scale
Nysius vinitor	Rutherglen bug
Bipolaris hawaiiensis	Fungi
Pestalotiopsis sp.	Fungi

MANGO
Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Bactrocera cucumis	cucumber Fruit Fly
Bactrocera frauenfeldi	fruit Fly
Bactrocera jarvisi	jarvis' fruit fly
Bactrocera musae	banana fruit Fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera opiliae	false Oriental Fruit Fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly
Dirioxa pornia	Island Fruit Fly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	yellow peach moth
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Frankliniella schultzei	flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Helopeltis clavifer	
Icerya aegyptiaca	Egyptian fluted scale
Idioscopus clypealis	mango hopper
Idioscopus nitidulus	mango hopper
Ischnaspis longirostris	black thread scale
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Monolepta australis	red-shouldered leaf beetle

Monolepta divisa	small monolepta beetle
Nipaecoccus vastator	karoo thorn mealybug
Ophiusa tirhaca	
Penicillaria jocosatrix	mango tipborer
Phenacaspis dilatata	mango scale
Planococcus citri	Citrus mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rastrococcus sp.	
Rhyparida limbatipennis	
Saissetia miranda	Mexican black scale
Selenothrips rubrocinctus	redbanded thrips
Sternochetus mangiferae	mango seed weevil
Asterina punctiformis	
Chaetothyrina tenuissima	stem sooty blotch
Cytosphaera mangiferae	stem-end rot
Elsinoe mangiferae (anamorph Sphaceloma mangiferae)	mango scab
Fusicoccum mangiferae	
Nattrassia mangiferae	stem-end rot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangifolia	storage rot
Pestalotiopsis theae	mango blight
Pestalotiopsis virgatula	mango leaf spot
Phomopsis mangiferae	stem end rot
Pythium mangifera (anamorph Oidium mangiferae)	mango powdery mildew
Schizoparme straminea (anamorph Coniella	schizoparme fruit rot

Non-regulated pests

Pest Scientific Name	**Common Name**
Aonidiella aurantii	California red scale
Ceroplastes destructor	white wax scale
Epiphyas postvittana	light brown apple moth
Helicoverpa armigera	tomato fruitworm
Heliothrips haemorrhoidalis	greenhouse thrips
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Icerya purchasi	cottony cushion scale
Parasaissetia nigra	nigra scale
Pseudococcus longispinus	long tailed mealybug
Saissetia coffeae	helmet scale
Toxoptera aurantii	black citrus aphid
Toxoptera citricida	brown citrus aphid
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite

Alternaria alternata	black stalk rot
Botryosphaeria dothidea (*anamorph Fusicoccum aesculi)*	canker
Botryosphaeria parva (*anamorph Fusicoccum parvum)*	canker
Botryosphaeria rhodina	gummosis
Botryosphaeria ribis (*anamorph Lasiodiplodia theobromae)*	canker
Botryotinia fuckeliana (*anamorph Botrytis cinerea)*	grey mould
Cladosporium cladosporioides	cladosporium leaf spot
Cochliobolus hawaiiensis	leaf spot, seed rot
Colletotrichum acutatum	anthracnose
Colletotrichum coccodes	anthracnose
Dipodascus Geotrichum (*anamorph Geotrichum candidum)*	sour rot
Dothiorella aromatica	stem-end rot
Epicoccum purpurascens	black mould
Erysiphe cichoracearum (*anamorph Oidium asterispunicei)*	powdery mildew
Fusicoccum luteum	bunch rot
Glomerella cingulata (*anamorph Colletotrichum gloeosporioides)*	anthracnose
Glomerella lagenaria (*anamorph Colletotrichum orbiculare)*	
Pestalotiopsis funereal	leaf spot
Pestalotiopsis versicolor	pestalotiopsis rot
Phytophthora nicotianae	buckeye rot
Pithomyces chartarum	facial eczema fungus
Pleospora allii (*anamorph Stemphylium vesicarium)*	black mould
Rhizopus stolonifer	rhizopus soft rot
Thanatephorus cucumeris (*anamorph Rhizoctonia solani)*	rhizoctonia rot

MELON
Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 2 and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Pest Scientific Name	**Common Name**

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	

Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida
Acarina
Tetranychidae

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota
Unknown Ascomycota
Hyponectriaceae

Monographella cucumerina (anamorph *Microdochium tabacinum*)	--

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae

Phomopsis cucurbitae	--

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae

Cercospora citrullina	cigar-end
Ulocladium sp.	-

Tuberculariales
Tuberculariaceae

Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--

Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak

Zygomycota: Zygomycetes
Mucorales
Choanephoraceae
Choanephora cucurbitarum blight

Bacterium

-
-
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* bacterial rot

Virus

-
-
-
tobacco ringspot nepovirus [strain] [VO] -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	

Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Unknown Dothideales	
Didymella bryoniae	cucumber stem rot

(anamorph *Phoma cucurbitacearum*)	
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum	powdery mildew
(anamorph *Oidium asteris-punicei*)	
Hypocreales	
Hypocreaceae	
Gibberella acuminata	fusarium storage rot
(anamorph *Fusarium acuminatum*)	
Gibberella avenacea	fusarium stem canker
(anamorph *Fusarium avenaceum*)	
Gibberella baccata	fusarium rot
(anamorph *Fusarium lateritium*)	
Gibberella intricans	root and stem dry rot
(anamorph *Fusarium equiseti*)	
Nectria haematococca	fusarium fruit rot
(anamorph *Fusarium solani*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	grey mould
(anamorph *Botrytis cinerea*)	
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria	--
(anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	sour rot
(anamorph *Geotrichum candidum*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	rhizoctonia rot
(anamorph *Rhizoctonia solani*)	
Stereales	
Atheliaceae	
Athelia rolfsii	Rolf's disease
(anamorph *Sclerotium rolfsii*)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	

Alternaria alternata	black stalk rot
Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Pseudomonadaceae	
Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

PAPAYA
Papaya

Papaya can be exported to New Zealand under Appendix No. 12 - Irradiation of the NZ BQA.

Growers and packhouse choosing 250 Gray (Gy) irradiation for papaya do not need to be specifically registered for the New Zealand export program.

Growers and packhouse choosing 150 Gy irradiation and in-field controls for papaya need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

***Conogethes punctiferalis* (yellow peach moth) is listed for papaya, and AQIS can certify freedom from this pest based on the following:**

Conogethes punctiferalis

1. If infield controls for *Conogethes punctiferalis* are carried out, fruit will be irradiated at 150Gy prior to export.

2. Where irradiation is chosen as the pest control activity for *Conogethes punctiferalis* a minimum dose of 250Gy must be applied prior to export. This treatment will be considered to be a generic treatment for all regulated arthropod pests listed below.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	**Common Name**
Asperisporium caricae	black spot
Phomopsis caricae-papayae	wet fruit rot
Phytopthora capsici	buckeye rot
Phytopthora palmivora	black rot
Bactrocera cucumis	**cucumber fruit fly** #
Bactrocera frauenfeldi	**fruit Fly** #
Bactrocera jarvisi	**jarvis' fruit fly** #
Bactrocera musae	**banana fruit fly** #
Bactrocera neohumeralis	**lesser Queensland fruit fly** #
Bactrocera tryoni	**Queensland fruit fly** #
Ceratitis capitata	**Mediterranean fruit fly** #
Dirioxa pornia	Island Fruit Fly
Aleurodicus dispersus	spiraling whitefly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale

Carpophillis maculatus	dried fruit beetle
Chrysomphalus dictyospermi	dictyospermum scale
C*onogethes punctiferalis*	**yellow peach moth** #
Eucalymnatus tessellatus	tessellated scale
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Ferrisia virgata	striped mealybug
Pericyma cruegeri	poinciana looper
Pseudaulacaspis cockerelli	Cockerell's scale
Papaya ringspot virus (type P strain)	PRSV-Type P

Non-regulated pests

Pest Scientific Name	**Common Name**
Brevipalpus phoenicis	passion vine mite
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria rhodina (anamorph Lasiodiplodia theobromae)	*g*ummosis
Botryosphaeria ribis	canker
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum dematium	anthracnose
Corynespora cassicola	leaf spot
Erysiphe cruciferarum	powdery mildew
Fusarium pallidoroseum	fruit core rot
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	anthracnose
Leveillula taurica	powdery mildew
Mycosphaerella caricae (anamorph Phoma caricae-papayae)	leaf spot
Phytophthora nicotianae	buckeye rot
Rhizopus stolonifer	rhizopus soft rot
Aphis spiraecola	spirae aphid

Denotes high impact pest

PINEAPPLE
Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale

Pseudococcidae
Dysmicoccus brevipes — pineapple mealybug
Isoptera
Rhinotermitidae
Rhinotermes intermedius — termite
Lepidoptera
Tineidae
Opogona glycyphaga — sugarcane bud moth

Mite

Arachnida
Acarina
Acaridae
Tyrophagus sp. — mould mite
Histiomidae
Histiostoma sp. — mite
Tarsonemidae
Tarsonemus ananas — pineapple mite
Tenuipalpidae
Dolichotetranychus floridanus — pineapple false spider mite

Nematode

Secernentea
Tylenchida
Hoplolaimidae
Rotylenchus reniformis
Pratylenchidae
Pratylenchus brachyurus — root lesion nematode

Symphylid

Symphyla
Unknown Symphyla
Symphylidae
Hanseniella sp. — symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetes
Dematiaceae
Thielaviopsis paradoxa
Moniliaceae
Penicillium funiculosum

Bacterium
-
-
Enterobacteriaceae
Erwinia ananas — marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae
Iridomyrmex glaber black house ant
Paratrechina vaga ant
Tapinoma sp. ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin's flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps

Mite

Arachnida
Acarina
Acaridae

Rhizoglyphus sp.	acarid mite

Nematode
Secernentea
Tylenchida
Meloidogynidae

Meloidogyne javanica	Javanese root knot nematode

Fungus
Ascomycota
Hypocreales
Hypocreaceae

Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot

Oomycota
Pythiales
Pythiaceae

Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus
-
-
-

tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	Common Name
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil

Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil

Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Myriapod

Diplopode	
Julida	
Blaniulidae	
Blaniulua guttulatus	spotted snake millipede

Mollusc

Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Limacidae	
Deroceras panormitanum	brown field slug
Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and 10 (field control programs)**

Growers and packhouse that are growing/packing tomatoes for export to New Zealand under appendix 4 to the NZ BQA must be registered for this purpose.

A number of Risk Group 2 pests have been listed for tomatoes. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested tomato fruit as a hitch-hiker, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on tomato fruit during AQIS pre-export inspection.

Thrips palmi

1. If *T. palmi* were present on harvested tomato fruit, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on tomato fruit during AQIS pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export application of dimethoate spray to tomatoes (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
4. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. musae* has never been detected on tomato fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	

Antherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips

Fungus

Oomycota

Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak

Virus

-	
-	
-	
	-
tobacco ringspot nepovirus [strain] [VO]	
tomato spotted wilt tospovirus [strain] [VO]	-

Phytoplasma

-
-
-
tomato big bud phytoplasma -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida
Acarina
Eriophyidae

Aculus lycopersici	tomato russet mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tetranychidae

Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Mycosphaerellaceae

Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot

Hypocreales
Hypocreaceae

Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot

Leotiales
Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot

Saccharomycetales
Dipodascaceae

Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot

Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae

Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot

Stereales
Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae

Lasiodiplodia theobromae	fruit and stem-end rot

Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot

Non-regulated non plant pests

None

WATERMELON
Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for watermelons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the NZ BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle

Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite

Tetranychidae

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Ascochyta spp.	-
Phomopsis cucurbitae	--

Oomycota

Pythiales

Pythiaceae

Pythium spp.	pythium rot

Bacterium

-

-

Enterobacteriaceae

Erwinia tracheiphila	bacterial wilt

Pseudomonadaceae

Acidovorax avenae subsp. *citrulli*	bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta

Hymenoptera

Formicidae

Solenopsis geminata	fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta

Coleoptera

Curculionidae

Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil

Collembola

Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite

Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Pleosporaceae
Leptosphaerulina trifolii — seed rot
Unknown Dothideales
Didymella bryoniae — cucumber stem rot
(anamorph *Phoma cucurbitacearum*)
Erysiphales
Erysiphaceae
Erysiphe cichoracearum — powdery mildew
(anamorph *Oidium asteris-punicei*)
Hypocreales
Hypocreaceae
Nectria haematococca — fusarium fruit rot
(anamorph *Fusarium solani*)
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana — grey mould
(anamorph *Botrytis cinerea*)
Sclerotinia sclerotiorum — cottony rot
Phyllachorales
Phyllachoraceae
Glomerella cingulata — bitter rot
(anamorph *Colletotrichum gloeosporioides*)
Glomerella lagenaria — --
(anamorph *Colletotrichum orbiculare*)
Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae
Thanatephorus cucumeris — rhizoctonia rot
(anamorph *Rhizoctonia solani*)
Stereales
Atheliaceae
Athelia rolfsii — Rolf's disease
(anamorph *Sclerotium rolfsii*)

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales

Sphaerioidaceae
Phoma exigua — phoma rot
Septoria cucurbitacearum — --

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Alternaria cucumerina — --
Moniliaceae

Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot

Oomycota

Peronosporales

Peronosporaceae

Pseudoperonospora cubensis	downy mildew

Bacterium

-

-

Pseudomonadaceae

Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI
Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for zucchinis and scallopinis. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested zucchini fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on zucchini fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to zucchini and scallopini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 11(winter window) to the NZ BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Zucchinis exported to New Zealand under Appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Aphis gossypii [vect.]	cotton aphid
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Bactrocera cucumis	**cucumber fruit fly #**
Bemisia tabaci	**sweet potato whitefly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite

Tetranychus kanzawai	**kanzawa mite #**
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite

Tomato big bud phytoplasma

Tobacco ringspot nepovirus [strain] [VO]

Non-regulated pests

Pest Scientific Name	**Common Name**
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	whitefringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph *Phoma cucurbitacearum)*	cucumber stem rot
*Dipodascus geotrichum (*anamorph *Geotrichum candidum)*	sour rot
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot

*Erysiphe cichoracearum (*anamorph *Oidium asteris-punicei)*	powdery mildew
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	
*Gibberella acuminata (*anamorph *Fusarium acuminatum)*	fusarium storage rot
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker
*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
*Thanatephorus cucumeris (*anamorph *Rhizoctonia solani)*	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

 # Denotes high impact pest

ATTACHMENT 2 FORMS

2.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional AQIS office**			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
EMAIL ADDRESS			
POSTAL OR BUSINESS ADDRESS			
	POST CODE		
PROPERTY ADDRESS			
	POST CODE		
REAL PROPERTY DESCRIPTION (of area under planting – please attach detailed maps)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual – Amendment 6B – March 2011 and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	Pumpkin
Strawberries	Rockmelon	Honeydew melon	Cucumber
Scaloppini			

AQIS Inspector: …….

Signature: ……

Regional Office: …….

Date: …….

Authorised stamp

2.2 APPLICATION FOR REGISTRATION OF: PACKHOUSE / FREIGHT FORWARDER / LOAD OUT FACILITY / EXPORT INSPECTOR (DELEGATE)

Please post or fax this form to your local regional AQIS office		
NAME		
AQIS EXPORT ESTABLISHMENT NUMBER (if applicable)		
EMAIL ADDRESS		
POSTAL ADDRESS		
	POST CODE	
PREMISES ADDRESS		
	POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a (circle as appropriate) packer / freight forwarder / load out facility / delegated export inspector for (commodities)……..... for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

The following persons are hereby nominated as those responsible for upholding requirements within the SOM.

Name	**Responsibility** (circle as appropriate)
……	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……	Product Integrity / Load Out / Export Inspection

I have read the arrangement and the Systems Operation Manual –Amendment 6B – March 2011 and agree to be bound by the conditions and restrictions contained therein as they apply to packhouses / freight forwarders / load out facilities / delegated export inspectors. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

AQIS Inspector: …….

Signature: ……

Regional Office: …….

Date: …….

Authorised stamp

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION

APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW **Please post or fax this form to your local regional AQIS office**			
NAME OF TREATMENT CENTRE			
AQIS EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
	POST CODE		
PREMISES ADDRESS			
	POST CODE		

DECLARATION

I/We, ... hereby apply for registration as a treatment centre as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual –Amendment 6B –March 2011 and agree to be bound by the conditions and restrictions contained therein as they apply to treatment centres.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

Treatment Type (please specify)

Methyl Bromide Fumigation	Dimethoate
Cold Storage	Irradiation

AQIS Inspector: …….

Signature: ……

Regional Office: ……..

Date: …….

Authorised stamp

2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the NZ BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the NZ BQA Systems Operation Manual – Amendment 6B – March 2011 and have the ability to recognise and identify the regulated pest and weed seeds of concern to New Zealand.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to NZ BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any NZ BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the NZ BQA and the instructions contained in the Systems Operation Manual for NZ BQA.

Signature .....

Printed Name ..... Date .....

AQIS Inspector: …….

Signature: ……

Regional Office: …….

Date: …….

Authorised stamp

2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

Page 1 of 2

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Amendment 6B – March 2011 of the Australian - New Zealand Bilateral Quarantine Arrangement and the NZ BQA Systems Operation Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the NZ BQA and the Systems Operation Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for NZ BQA commodities will provide properly identified inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection

The following parties and persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	Company	Commodity	Address
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Treatment Supervision Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the NZ BQA for and on behalf of this Company.

Company	**Commodity**	**Address**
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Loading Supervisory Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of NZ BQA commodities as is required by the NZ BQA and the contents of this Manual.

Company	**Commodity**	**Address**
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the NZ BQA and the Systems Operation Manual Amendment 6B – March 2011 required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

AQIS Inspector: …….

Signature: ……

Regional Office: …….

Date: …….

Authorised stamp

2.6 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Tick

Date	Trade Description .....
Commodity	Commodity .....
No of Cartons	Registered Grower No. .....
Registered Grower No.	Registered Packing Establishment .....
	.....
Ex 28/RFP Number/s:	Australian Origin .....
.....……	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250
Exporter/s	(Tick one) .....
	Exporter Inspection completed by:.....
	(a) Exporter
Inspector Name	(b) ED (name)
(Block Letters)	**Inspected by**:
.....	Grower Line .....
Inspector's Signature	Consignment Line .....

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NR**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed ☐ **Failed** ☐ **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Regulated Pest
****Please note, this is a template only: packhouse/ exporters are permitted to formulate their own copies of this template, provided all of the above information is contained. This form will be checked and approved at audit**

2.7 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	**Number of Cartons/Commodity**	**Temperatures Taken ***

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

2.8 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKHOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0C$.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

2.9 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand should I/we wish to re-enter the Arrangement protocol at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in block letters Signature Date

....

Voluntary Withdrawal

I/we agree my/our property is no longer required to be registered under the terms and conditions required for the New Zealand export trade for NZ BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand should I/we wish to re-enter the Arrangement at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in Block letters Signature Date

....

AQIS OFFICE DOCUMENTATION
Fax / e-mail to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or
Inspector's Signature

.....

2.10 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection/audit of the following property/premises:- (Grower – Packer – ED – Treatment Centre – Exporter – Freight Forwarder – Other ……) (select appropriate title)

Name .....
Address .....
.....
.....
Reg No .....

I believe for the following reasons that the entity outlined above no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) they (please indicate):

have no intention to correct the above mentioned deficiency in the immediate future

OR

are suspended until corrective action has been implemented and successful re-audit has been undertaken

I hereby declare the entity outlined above is suspended from Appendix …….. (all, 4, 10 etc) of the Australia - New Zealand NZ BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Representative Name	Representative Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

2.11 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY THE TRANSFER OF DIMETHOATE TREATED COMMODITIES

I, ...of .....……

.....……...

hereby declare that the ..... cartons of

……..tomatoes/capsicums/cucumbers/rockmelons/hodewdew melons/scallopinis (circle as

applicable) consigned to..... .....……...on

..... (date) were harvested from the following registered

blocks……..

…… AND

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute (tomatoes only).

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

3. further declare ..... (insert name of supervisor) a designated person nominated by..... (insert name of exporter) has supervised the loading of this consignment for transport to ….....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....20.....

Signature ..... Witness .....

2.12 CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28/RFP Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

2.13 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

2.14 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

<table>
<tr><td>Grower name and address:</td><td>Cucurbit type (please tick ✓)</td><td>Treatment (please tick ✓)</td></tr>
<tr><td rowspan="2"></td><td>Cucumber ☐
Honeydew melon ☐
Rockmelon ☐
Scallopini ☐
Watermelon ☐
Zucchini ☐</td><td>Appendix 3 & 10 ☐
(methyl bromide)
Appendix 4 & 10 ☐
(dimethoate dip)
Appendix 10 & 11 ☐
(winter window)</td></tr>
<tr><td colspan="2">Declaration

I,……hereby declare the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.

…….. ……/……/……
Signature Date</td></tr>
<tr><td>Grower number:</td><td colspan="2" rowspan="3"></td></tr>
<tr><td>Consignee name and address:</td></tr>
<tr><td></td></tr>
</table>

Production block number	Package type (carton, bin etc)	Number of packages	Total mass

Australia – New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual 6C

This systems operation manual incorporates the New Zealand import health standards for Australian fruit fly host material and the Australian Quarantine and Inspection Service's operational requirements.

This manual is maintained and controlled by the AQIS Plant Programs Section in Canberra

Systems Operation Manual (SOM)

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES 7

AMENDMENT RECORD 10

GLOSSARY OF TERMS 11

DEFINITIONS 12

INTRODUCTION 13
Scope of the Manual 13

SECTION 1 13

1.1 Pest categories 13
1.1.1 Risk Group 3 (RG3) Pests 13
1.1.2 Risk Group 2 (RG2) Pests 14
1.1.3 Risk Group 1 (RG1) Pests 14
1.1.4 Non Regulated Pests 14
1.1.5 Regulated Pests 14

1.2 Maximum pest levels 14

Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS 15

1.3 Contaminates 15

SECTION 2 TREATMENT APPENDICES 16

2.1 Summary 16

Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES 17

2.2 Appendix 1 – Country freedom from fruit fly 32

2.3 Appendix 2 – Area freedom districts within Australia 32
2.3.1 General requirements 32
2.3.2 Approved area freedom districts 33

2.4 Appendix 3 – Fumigation 34

2.5 Appendix 4 – Dimethoate 35

2.6 Appendix 5 – Cold treatment 35

2.7 Appendix 6 – Non host 35

2.9 Appendix 8 – Not currently in use 35

2.10 Appendix 9 – Not currently in use 35

2.11 Appendix 10 – Field control programs 35

2.12 Appendix 11 – Winter window 36

2.13 Appendix 12 – Irradiation 36

SECTION 3 GROWER RESPONSIBILITIES 37

3.1 Summary 37

3.2 General requirements 38

3.3 Registration 39

3.4 Orchard responsibilities 39
3.4.1 Citrus growers 40
3.4.2 Avocado growers 40

3.5 Audits 40
3.5.1 Non Compliance 41
3.5.2 Packhouse Approved Arrangement systems 41
3.5.3 Security and supervision 42

SECTION 4 CROP MONITOR RESPONSIBILITIES 43

4.1 Registration 43

4.2 Audit 43

4.3 Non Compliance 43

SECTION 5 PACKHOUSE RESPONSIBILITIES 44

5.1 General requirements 44

5.2 Documentation 44

5.3 Delegation of exporter responsibilities 44
5.3.1 General 44
5.3.2 Security and supervision 45
5.3.3 Inspection 45

5.4 Audit 45
5.4.1 Non Compliance 46

5.5 Approved Arrangements – Packhouse 46
5.5.1 General requirements 46
5.5.2 Audit 47
5.5.3 Inspection requirements 47

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS 47

5.5.4 Documentation 48
5.5.5 Post treatment security 48

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES 50

6.1 General requirements 50

6.2 Registration 50

6.3 Audit 50
6.3.1 Non Compliance 50

6.4 Post treatment security 50
6.4.1 Registration 51
6.4.2 General requirements 51

6.5 Post treatment transportation 51

6.6 Treatment Appendices 52

6.6.1 Appendix 3 – Fumigation 52

Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES 52

6.6.2 Appendix 4 – Dimethoate 54

Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES 54

6.6.3 Appendix 5 – Cold treatment 56

Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS 56

Table 7 – CONTINGENCY TREATMENT OPTIONS DURING MEDITERRANEAN FRUIT FLY OUTBREAKS WITHIN AREA FREEDOM DISTRICS 56

Table 8 – CONTINGENCY TREATMENT OPTIONS DURING QUEENSLAND FRUIT FLY OUTBREAKS WITHIN AREA FREEDOM DISTRICS 57

6.6.3.6 On-shore cold treatments 58
6.6.3.6.2 AQIS supervision 58
6.6.3.6.3 Record Requirements 58

6.6.3.7 In-transit cold treatments 59

Attachment to section 6.6.3.7.1 Placement of temperature probes – in transit 60

6.6.4 Appendix 12 – Irradiation 61

6.7 Tablegrape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti* 63
6.7.1 General requirements 63
6.7.2 Treatment 63
6.7.3 Traceability 63
6.7.4 Additional precautionary measures 63

SECTION 7 EXPORTER RESPONSIBILITIES 64

7.1 General requirements 64

7.2 Exporter Inspection 64

7.2.1 Split Consignment Inspections 65

7.3 Documentation 65

7.4 Rejected Produce 66

7.5 Security of Produce 66

7.6 Audit 66
7.6.1 Non-compliance 67

SECTION 8 GOVERNMENT RESPONSIBILITIES 68

8.1 AQIS Canberra office 68
8.1.1 Manager - Plant Programs 68

8.2 AQIS State Offices 68
8.2.1 Registration requirements 69
8.2.2 Sampling requirements 69
8.2.3 AQIS inspection procedures 69
8.2.4 Consignment line samples 70
8.2.5 Rejection procedures 70

8.3 Audit 71
8.3.1 Audits after Product Rejections by AQIS 71

Table 9 - AQIS AUDIT FREQUENCY 72

8.4 Fruit Fly Area Freedom – State Departments 73
8.4.1 Validation of Area Freedom 73
8.4.2 Trapping 73

Attachment to Section 8.1 AQIS Plant Contact List 75

ATTACHMENT 1 - NEW ZEALAND PEST LIST 76
AVOCADO 76
BANANA 81
CAPSICUM 84
CITRUS 93
CUCUMBER 99
GRAPE 107
LYCHEE 114
MANGO 116
MELON 119
PAPAYA 127

ATTACHMENT 2 FORMS 153
2.1 APPLICATION FOR GROWER REGISTRATION 153
2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION 155
2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 156
2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT 157
2.6 INSPECTION RECORD 159
2.7 FUMIGATION RECORD 160

2.9 WITHDRAWAL NOTICE 163
2.10 SUSPENSION NOTICE 164
2.11 DECLARATION OF DIMETHOATE TREATMENT 165
2.12 CONTAINER REPORT SHEET 166
2.14 CUCURBIT GROWER DECLARATION 168
2.15 NZ - FRUIT SENSOR RECORD OF CALIBRATION 169

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Manager Horticulture Exports Plant Exports Operations Branch – Horticulture Attn s. 22(1)(a)(ii)	Canberra Office E-mail: s. 22(1)(a)(ii) @aqis.gov.au
New Zealand Contact Officer Plant Exports Operations Branch – Horticulture Attn s. 22(1)(a)(ii)	Canberra Office E-mail: s. 22(1)(a)(ii)@aqis.gov.au
New Zealand Contact Officer Plant Exports Operations Branch – Horticulture Attn s. 22(1)(a)(ii)	Canberra Office E-mail: s. 22(1)(a)(ii) @aqis.gov.au
Area Technical Manager – South Plant Exports Operations Branch – Horticulture Attn s. 22(1)(a)(ii)	Canberra Office E-mail: s. 22(1)(a)(ii) @aqis.gov.au
Area Technical Manager – South West Plant Exports Operations Branch – Horticulture Attn s. 22(1)(a)(ii)	Canberra Office E-mail: s. 22(1)(a)(ii) @aqis.gov.au
Area Technical Manager – North Plant Exports Operations Branch – Horticulture Attn s. 22(1)(a)(ii)	Canberra Office E-mail: s. 22(1)(a)(ii) @aqis.gov.au
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AQIS State Offices and State Departments of Agriculture will make up additional 'Official Distribution Lists' for their own requirements that may include industry bodies, exporters and packhouse/growers. AQIS Offices and State Departments of Agriculture must implement procedures to record distribution lists for the issue of controlled copies of this Manual and for amendments to this manual to those nominated on distribution lists.

AMENDMENT RECORD

Amendments to this manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	s. 22(1)(a)(ii)	18 June 1999
2		14 July 1999
3		27 April 2000
4		March 2001
5 5A 5B 5C		29 April 2002 March 2002 December 2004 January 2006
6 6A 6B 6C		August 2006 August 2007 March 2011 May 2011
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GLOSSARY OF TERMS

ANVAS	Avocado Nursery Voluntary Accreditation Scheme
AA	Approved Arrangement
AQIS	Australian Quarantine and Inspection Service
DAFF	Australian Government Department of Agriculture, Fisheries and Forestry
Dmin	The localized minimum absorbed dose within the process load
Dmax	The localized maximum absorbed dose within the process load
EXDOC	Electronic Export Documentation
EX28	Notice of Intention to Export/Export Permit
EX161	Inspection advice notice
EX186	Transfer Certificate
EX222	Approved Arrangement equivalent of EX28
ED	Exporter Delegate
Gray (Gy)	Unit of absorbed dose where 1 Gy is equivalent to the absorption of 1 joule per kilogram
IHS	Import Health Standards (New Zealand)
MAF	Ministry of Agriculture and Forestry (New Zealand)
MeV	Mega Electron Volt
MAP	Maximum Allowable Prevalence
NZ BQA	Australia-New Zealand Bilateral Quarantine Arrangement
PHYTO	Export conditions database.
RFP	Electronic Request for Permit

DEFINITIONS

AQIS Inspection	An inspection of any number of packages from one exporter from the same treatment pathway presented for inspection at one time.
Consignment line inspection	Inspection consists of commodities from a common treatment pathway. The inspection lot can be made up of different growers provided grower line inspections have been undertaken.
Grower line inspection	Inspection that must be performed prior to AQIS inspection and consists of one grower, one commodity and one treatment pathway.
Phytosanitary certificate	A certificate issued in accordance with Article V of the International Plant Protection Convention or at the request of a foreign country authority.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a hand).

INTRODUCTION

The New Zealand Bilateral Quarantine Arrangement (NZ BQA) is a formal agreement between the Australian Government Department of Agriculture Fisheries & Forestry and the New Zealand Ministry of Agriculture and Forestry (MAF), to ensure New Zealand's pre-export requirements are documented. This manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The NZ BQA details a series of treatment appendices that describe the requirements for a particular treatment for fruit fly host material. The structure incorporates developments in relation to the documentation of New Zealand Import Health Standards (IHS) on a commodity-by-commodity basis.

Scope of the Manual

This Systems Operation Manual (SOM) is designed to ensure;

- Only approved fruit fly host commodities are exported to New Zealand;
- Homogeneity of fruit fly host commodity consignments;
- Approved treatments for fruit fly host produce are used;
- Required levels and intensity of inspection of fruit fly host produce are maintained;
- Post treatment security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce;
- Trace back to grower/packer/treatment centre (as appropriate); and
- Accurate phytosanitary certification in accordance with New Zealand requirements

AQIS Regional Offices and State Departments of Agriculture (or equivalents) are to conduct management audits of the systems to ensure state responsibilities are being adequately performed and recorded.

This SOM gives instructions for audit procedures and maintenance of records that will be the responsibility of AQIS Regional Offices, and where applicable State Departments of Agriculture or their equivalents.

SECTION 1

1.1 Pest categories

MAF have commenced the re categorisation of pests as regulated and non-regulated pests. Certain regulated pests are deemed by MAF to be high impact pests which is divided into high impact fruit flies and high impact non fruit fly. High impact fruit fly categorisation is equivalent to the previous RG3 and high impact non fruit fly equivalent to RG2 pest categories.

As MAF review current IHS's the existing risk categories of RG1, RG2 and RG3 will be transcribed into the new categories. At this point in time only the litchi, mango, papaya, zucchini and banana pest lists reflect this new terminology.

1.1.1 Risk Group 3 (RG3) Pests

Are pests which upon entry into New Zealand would cause major market access disruption for a wide range of New Zealand commodities and/or have significant effects on environment or agricultural production. This group includes species of economically significant fruit flies.

These pests require treatment to be undertaken in Australia with documented procedures to ensure AQIS phytosanitary certification is accurate and auditable by MAF.

If this level pest is detected in New Zealand then the consignment will be re-exported or destroyed and the treatment pathway suspended until such time as an AQIS audit is conducted, and any associated corrective action is undertaken and results accepted by MAF.

1.1.2 Risk Group 2 (RG2) Pests

Are pests which upon entry into New Zealand could cause major market access disruption and/or have significant effects on environment or the agricultural production of a particular commodity.

These pests require some form of management practices to be undertaken (i.e. infield controls, area freedom, or post harvest treatments). An additional declaration to this effect must be made on the phytosanitary certificate.

If this level pest is detected in New Zealand the consignment will be re-exported, destroyed or where appropriate ordered for appropriate treatment. There will be no suspension of trade but a follow up AQIS audit will be conducted to determine cause of the system failure and associated corrective actions undertaken. AQIS may suspend specific commodity pathway until cause of failure is determined and corrective action undertaken.

1.1.3 Risk Group 1 (RG1) Pests

RG1 pests are those pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

These pests require no specific formal treatment or controls, AQIS will inspect for these pests at export inspection, if detected the consignment must be subjected to appropriate treatment/re-conditioning and represented for exporter/exporter delegate (ED) AQIS inspection.

If this level of pest is detected in New Zealand the consignment would be available to be re-conditioned, subject to appropriate treatment (if available), re-export or destroyed.

1.1.4 Non Regulated Pests

These pests have an unlimited tolerance during inspection and are regarded as non-actionable pests between Australia and New Zealand. It should be noted that excessive levels of non-regulated pests may interfere with AQIS inspection and may result in longer inspection times to ensure accurate identification.

1.1.5 Regulated Pests

Regulated pests are regarded as actionable pests between Australia and New Zealand. Actions would be undertaken if they were intercepted/detected. As well as quarantine pests, these include new organisms as defined by the New Zealand *Hazardous Substances and New Organisms Act 1996*, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants.

1.2 Maximum pest levels

Table 1 details inspection levels and tolerances that will ensure that a 95% confidence level that Maximum Allowable Prevalence (MAP) will not be exceeded.

The sample size must be selected/nominated by the exporter or exporter delegate prior to commencement of inspection and cannot be varied. This sample size must be maintained in all subsequent inspections, including AQIS export inspection.

Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weed seeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 – 2000	520	0	≤ 7	0
2001 – 3000	550	0	≤ 7	0
3001 – 4000	560	0	≤ 7	0
4001 – 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

1.3 Contaminates

Consignments contaminated with soil, or other potential carriers of quarantine pests (eg leaf litter) must not exceed tolerances listed below. The consignment may be reconditioned to remove the infestation. After reconditioning, the consignment must be re-inspected and may be exported if found free from infestation.

Consignment lines contaminated with soil in excess of 25g per 600 units shall be washed free of soil prior to release, re-shipped, or destroyed at the importers options and expense.

Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped, or destroyed at the importers option or expense.

SECTION 2 TREATMENT APPENDICES

2.1 Summary

The NZ BQA is divided into separate treatment pathways, called treatment appendices.

The appendices form the framework for the treatment of commodities for the species of economically significant fruit flies (RG3 pests).

The treatment appendices are treated as separate distinct pathways and as such commodities exported under the same treatment pathways may be inspected together at AQIS inspection. Commodities from separate treatment pathways may not be combined for inspection.

TREATMENT FRAMEWORK
(MARCH 2011)

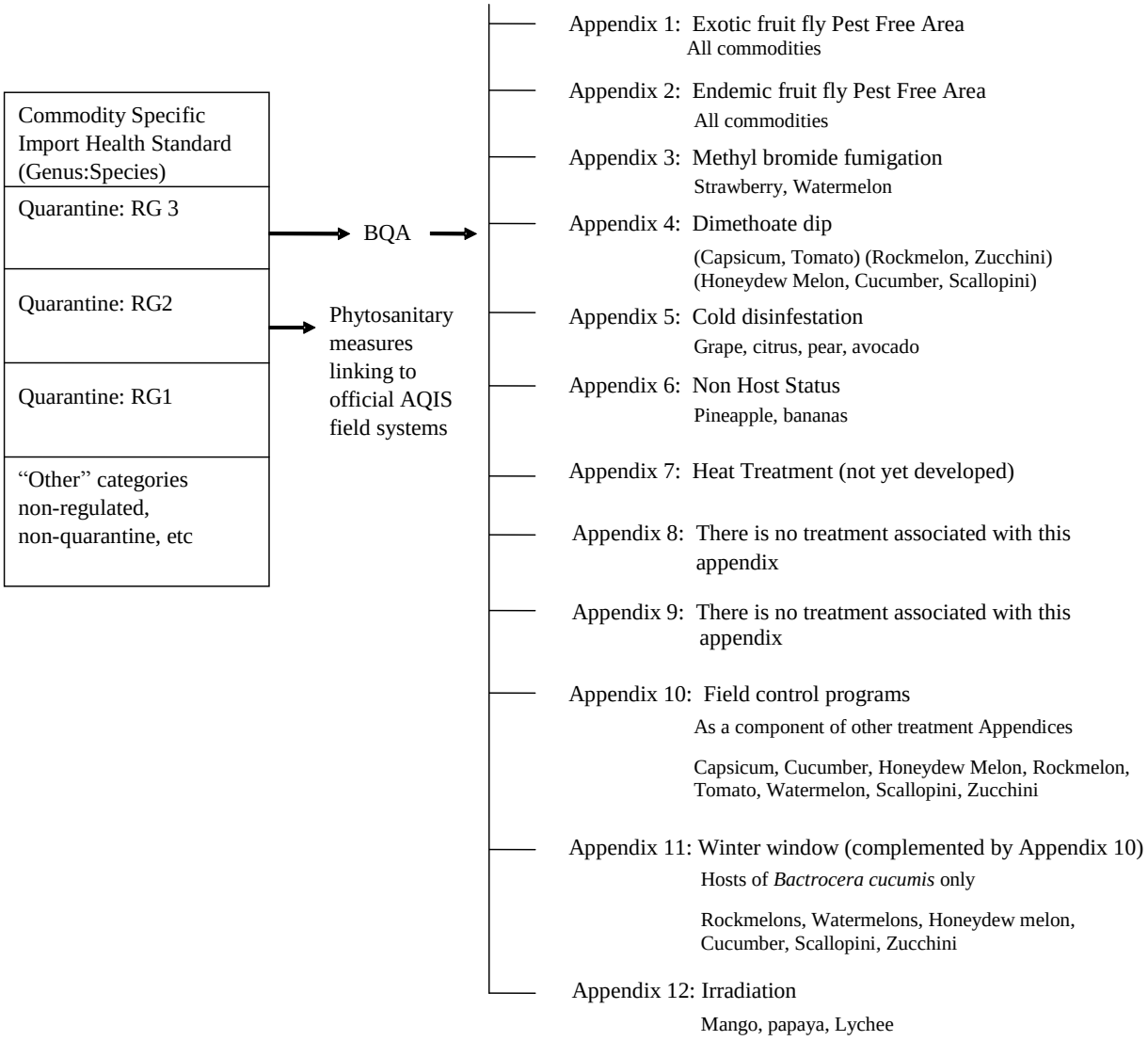


Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Avocado *Persea americana*	Area freedom *Appendix 2*	✓	✓		✓	✓	*EXDOC Endorsement No 1641* 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The avocadoes in this consignment have gone through appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia. **OR** *EXDOC Endorsement No 1582* 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Avocado *Persea americana*	Cold storage *Appendix 5* 1°C (±0.2°C) for 16 Days	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1649*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The avocadoes in this consignment have gone through appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of *Tephritidae* species of economic significance into New Zealand from Australia. **OR** ***EXDOC Endorsement No 1585*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Banana *Musa spp*.	Non-host status *Appendix 6*	*✓	*✓	*✓	✓	✓	***EXDOC Endorsement No 1783*** 1) The bananas have undergone appropriate pest control activities that are effective against Pink hibiscus mealybug (Maconellicoccus hirsutus), 2) The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significance in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS. OR ***EXDOC Endorsement No 1802*** 1) The bananas have been sourced from an area free (verified by an official detection survey) from Pink hibiscus mealybug (Maconellicoccus hirsutus), 2) The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significance in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS. ** Growers and packhouses need not be registered if in field controls are not being implemented for pink hibiscus mealybug. If this is the case, bananas must be fumigated prior to export. If fumigation is to occur, the treatment must be undertaken at a facility registered under the BQA.*
Capsicum *Capsicum annuum*	Area freedom *Appendix 2* * If fumigation to occur, grower need not be registered for control of *Lepidopteran* species.	*✓	✓		✓	✓	***EXDOC Endorsement No 1637*** 1) The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The capsicums in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** If growers are not controlling Lepidopterean spp (i.e. YPM) fumigation to be carried out prior to export.*

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
*Capsicum *Capsicum annuum*	Dimethoate ** Appendix 4 & 10* <u>spray</u> only at 400ppm and fruit must be sprayed for a minimum of one minute	*✓	✓	✓	✓	✓	***EXDOC Endorsement No 1642*** 1) The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The capsicums in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The capsicums in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** *If growers is not controlling Lepidopterean spp (i.e. YPM) fumigation to be carried out prior to export, "The Capsicums in this consignment have been Fumigated with methyl bromide at the rate of 32gm per cubic metre for 2 hours at 21℃ at a maximum of 50% chamber capacity"*
Citrus *	Area freedom *Appendix 2*	*	✓		✓	✓	***EXDOC Endorsement No 1638*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The citrus in this consignment have undergone appropriate pest control activities that are effective against Citrus black spot (*Guignardia citricarpa*), 3) The citrus in this consignment have been treated in accordance with Appendix 2 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** Nil grower registration required under area freedom appendix, as Citrus Black Spot is restricted to the state of Queensland.*

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Citrus *	Cold storage *Appendix 5* 1°C (±0.6°C) for 16 days Or 0°C or below for not less than 13 days	*✓	*✓	✓	*✓	✓	***EXDOC Endorsement No 1648*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The citrus in this consignment have undergone appropriate pest control activities that are effective against Citrus black spot (*Guignardia citricarpa*), 3) The citrus in this consignment have been treated in accordance with Appendix 5 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** Grower, packhouse, freight forwarder / load-out registration required only for the state of Queensland, where Citrus Black Spot occurs.*
Cucumber *Cucumis sativus*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1639*** 1) The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
*Cucumber *Cucumis sativus*	Dimethoate **Appendix 4 & 10* <u>dip only</u> 400ppm, fruit must remain submersed for one minute	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1643*** 1) The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The cucumbers in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Cucumber *Cucumis sativus*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1627*** 1) The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Grapes *Vitis vinifera*	Area freedom *Appendix 2*	✓	✓		✓	✓	***EXDOC Endorsement No 1574*** 1) The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The grapes in this consignment have been treated in accordance with Appendix 2 (Area freedom) of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 3) The grapes in this consignment have been treated for *Lactrodectus hasselti* (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, 4) The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis*, 5) The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccis hirsutus*.
Grapes *Vitis vinifera*	Cold storage *Appendix 5* 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1577*** 1) The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The grapes in this consignment have been treated in accordance with Appendix 5 (Cold storage) of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 3) The grapes in this consignment have been treated for *Lactrodectus hasselti* (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, 4) The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis*, 5) The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccis hirsutus*.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Honeydew *Cucumis melo*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1640*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Honeydew *Cucumis melo*	Dimethoate ** Appendix 4 & 10* <u>dip only</u> 400ppm, fruit must remain submersed for one minute	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1644*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Honeydew *Cucumis melo*	Winter Window ** Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1628*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Lychee *Litchi chinensis*	Irradiation *Appendix 12* 250 or 350 Gy			✓	*✓	✓	***EXDOC Endorsement No 2298*** 1) The Lychees in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS. ***** Registration required post treatment.
Mango *Mangifera indica*	Irradiation *Appendix 12* 250 or 350 Gy			✓	*✓	✓	***EXDOC Endorsement No 3287*** 1) The Mangoes in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS. ***** Registration required post treatment.
Papaya *Carica papaya*	Irradiation *Appendix 12* * 150 Gy	✓	✓	✓	✓	✓	***EXDOC Endorsement No 3425*** 1) The papaya in this consignment have undergone appropriate pest control activities that are effective against Yellow peach moth (*Conogethes punctiferalis*), 2) The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between New Zealand MAF and the Australian Quarantine Inspection Service. ** Grower and packhosue registration required for Yellow Peach Moth control, if papayas are irradiated at this rate.*
Papaya *Carica papaya*	Irradiation *Appendix 12* 250 Gy			✓	*✓	✓	***EXDOC Endorsement No 3425*** 1) The papaya in this consignment have undergone appropriate pest control activities that are effective against Yellow peach moth (*Conogethes punctiferalis*), 2) The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between New Zealand MAF and the Australian Quarantine Inspection Service. ***** Registration required post treatment.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Pears *Pyrus communis*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No. 1575*** 1) The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia.
Pears *Pyrus communis*	Cold storage *Appendix 5* 1°C (±0.6°C) for 16 days Or 0°C or below for not less than 13 days			✓	*✓	✓	***EXDOC Endorsement No. 1578*** 1) The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of Tephritidae species of economic significance into New Zealand from Australia. * Registration required post treatment.
Pineapple *Ananas comosus* (only smooth cayenne)	Non-host status *Appendix 6*					✓	***EXDOC Endorsement No 1579*** 1) The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Rockmelon *Cucumis melo*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1631*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Rockmelon *Cucumis melo*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1630*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The rockmelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Rockmelon *Cucumis melo*	Dimethoate *Appendix 4* <u>dip only</u> 400ppm,fruit must remain submersed for one minute			✓	*✓	✓	***EXDOC Endorsement No 1646*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** Registration required post treatment.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Scallopini *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1632*** 1) The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Scallopini *Cucurbita pepo*	Dimethoate **Appendix 4 & 10* <u>dip only</u> 400ppm, fruit must remain submersed for one minute	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1633*** 1) The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The scallopinis in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Scallopini *Cucurbita pepo*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1778*** 1) The scallopini in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 2) The scallopini in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 3) The scallopini in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MAF.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Strawberry *Fragaria spp*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1573*** 1) The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The strawberries in this consignment have been treated in accordance with Appendix 2 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Strawberry *Fragaria spp*	Methyl bromide *Appendix 3* 48g/m^3 for 3 hours at a temperature of at least 15°C			✓	*✓	✓	***EXDOC Endorsement No 1576*** 1) The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The strawberries in this consignment have been treated in accordance with Appendix 3 of the arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** Registration required post treatment.
Tomato *Lycopersicon csculentum*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1634*** 1) The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The tomatoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT		REGISTRATION				ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
* Tomato *Lycopersicon csculentum*	Dimethoate **Appendix 4 & 10* spray or dip at 400ppm Fruit must be sprayed or remain submersed for one minute.	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1645*** 1) The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The tomatoes in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Watermelon *Citrullus lanatus*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1635*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The watermelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Watermelon *Citrullus lanatus*	Methyl bromide Appendix 3 32g/m3 for 4 hours at a temperature of 21°C to 26°C	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1626*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The watermelons in this consignment have been treated in accordance with Appendix 3 and Appendix 10 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
* Watermelon *Citrullus lanatus*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1629*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The watermelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Zucchini *Cucurbita pepo*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1636*** 1) The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The zucchinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Zucchini *Cucurbita pepo*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 3339*** 1) The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry of Agriculture and Forestry, 2) The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MAF, 3) The zucchinis in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the New Zealand Ministry of Agriculture and Forestry and the Australian Quarantine and Inspection Service concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

2.2 Appendix 1 – Country freedom from fruit fly

MAF recognise Australia is free of several species of fruit fly of economic significance to New Zealand (based on MAF Biosecurity Authority Standard 128.03.07).

Australia's freedom status for these flies is maintained through quarantine restrictions and a national monitoring program. The monitoring program is managed by the Office of the Chief Plant Protection Officer (OCPPO) and consists of exotic fruit fly trapping and monitoring regimes conducted at international airports and seaports.

2.3 Appendix 2 – Area freedom districts within Australia

2.3.1 General requirements

Appendix 2 refers to economic species of fruit flies which are endemic to Australia for which, through trapping and monitoring regimes, area freedom for specific species of fly have been established. The areas listed below have been audited and accepted by MAF as complying with MAF Biosecurity Authority Standard 158.03.06.

Area freedom will be assumed, unless through State Department advice, AQIS notifies MAF to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. One or more larvae or pupae are found in locally grown fruit; or
. Five male fruit flies are trapped within 1 km of each other, within a 14-day period; or
. A single female fly is trapped.

In this case, "Area Freedom" will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MAF as meeting the requirements and conditions of MAF Biosecurity Authority Standard 158.03.06, the suspension period will be reduced to;

. one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site;

. Should 2 outbreak sites occur within 1 – 3 km of each other a 30km outbreak zone will be applied, the zone will be centred on a point mid-distance between two outbreaks.

State Departments of Agriculture (or equivalent) must report all fruit fly finds in the recognised zones to the AQIS Canberra office within 48 hours of detection and identification. This information will then be supplied to MAF at the earliest opportunity.

2.3.2 Approved area freedom districts

Districts approved by MAF are listed below.

Riverina – MIA

This area covers the horticulture growing districts along the Murrumbidgee River (as well as the township of Hillston on the Lachlan River), and includes (but is not excluded to) the townships/cities of Leeton, Yanco, Griffith, Darlington Point and Tharbogang.

Area (a) is known as the area including Griffith, Tharbogang, Leeton, Narrandera and Darlington Point and towns located between;

Area (b) is the Hillston District.

Area (c) is the Menindee District.

Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and areas between.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and areas between.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and areas between.

Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri,Barmera, Waikerie and areas between.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, the Shire of Mildura and areas between.

Area (i) the Mypolonga Township surrounds.

Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

The Ord River Irrigation Area – Western Australia

This area covers the Ord River Irrigation Area (ORIA) as outlined below. This is for Mediterranean fruit fly area freedom only.

Area (j) Ord River Irrigation Area (Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the town site of Kununurra and north-west of the Ord River).

The Shepparton Irrigation Region (SIR)

Area (k) Production areas and townships of Cobram, Koonoomoo, Invergordon, Numurkah, Katandra West, Katamatite, Wunghnu, Tallygaroopna, Congupna,Merrigum, Kyabram, Lancaster, Girgarre, Stanhope, Tongala, Shepparton, Ardmona, Coomboona, Undera, Mooroopna, Arcadia, Kialla, Murchison, Toolamba, Tatura, Dhurringile, Yarroweyah, Strathmerton, Katunga, Echuca, Colbinabbin, Corop, Rochester, Lockington, Rushworth, Wyuna, Bunbartha, Barmah, Picola, Nathalia, Waaia, and Bearii and seasonal tomato production areas.

NOTE: **Should any stages of Risk Group 3 fruit fly (alive or dead) be found during AQIS or Industry inspections in Australia, AQIS will inform the relevant State Department of Agriculture of the detection. AQIS will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.**

Should any stages of Risk Group 3 fruit fly (either alive or dead) be found during MAF import inspections, area freedom certification will be suspended for all districts of Australia until an AQIS audit determines the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on results of the AQIS audit.

Should any stages of a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between AQIS and MAF.

2.4 Appendix 3 – Fumigation

This treatment pathway allows the export of watermelons and strawberries to New Zealand. Fruit must be subjected to Methyl Bromide fumigation.

Watermelons exported under this pathway must also comply with Appendix 10 which covers field control programs of fruit flies. Therefore strawberries and watermelons may not be combined for inspection.

Fumigation practices must also be carried out in accordance with the AQIS Methyl Bromide Standard – Verson 1.4.

The Standard contains details for effective fumigation procedures and can be found on the AQIS website. http://www.daff.gov.au/data/assets/pdf_file/0010/734464/mbr-standard.pdf and via the link on the Phyto database website.

2.5 Appendix 4 – Dimethoate

This treatment pathway allows the export of tomatoes, capsicums, zucchinis, rockmelons, honeydew melons, cucumbers, and scallopini to New Zealand. Fruit must undergo mandatory dimethoate treatment. For some commodities this appendix must be used in conjunction with Appendix 10 (field control programs).

2.6 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand. Cold disnfestation treatments can be completed on shore or in-transit.

2.7 Appendix 6 – Non host

This pathway deals with commodities which have been accepted by MAF as non-host of endemic Australian fruit flies. Pineapples of the **smooth cayenne variety** and bananas can be exported under this pathway.

Pineapples have been historically accepted as non-hosts to the fruit fly species of economic significance present in Australia.

Bananas are accepted as being non-hosts to the fruit fly species of economic significance present in Australia when in the unripe stage of maturity.

Bananas must be harvested, packed and exported in the unripe (i.e. mature green) stage to New Zealand. Consignments containing bananas at the colour break to full ripe stage will be rejected for export to New Zealand.

2.8 Appendix 7 Heat treatments

At this time there are no commodities permitted for export under this pathway.

2.9 Appendix 8 – Not currently in use

2.10 Appendix 9 – Not currently in use

2.11 Appendix 10 – Field control programs

The field control programs referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies.**

This appendix is intended to be used in combination with other appendices rather than as a stand alone treatment. For example, cucumber exports to New Zealand under the dimethoate dip treatment require both a post-harvest dip and pre-harvest field control program – a combination of both Appendix 4 and Appendix 10.

Treatment	**Commodity**
Appendix 3 - Methyl bromide fumigation	watermelon
Appendix 4 – Dimethoate	capsicum, scallopini, cumber honeydew melon, tomato
Appendix 11 – Winter window	rockmelon, honeydew melon, cucumber, watermelon, zucchini, scallopini

2.12 Appendix 11 – Winter window

A "winter window" access period has been negotiated between MAF and AQIS, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly). "Winter window" specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment. The access period is between **1 May and 31 August in any year** (arriving in New Zealand).

Rockmelons, scallopini, honeydew melons, zucchini and **cucumbers** can be exported under this appendix from areas recognised free from Mediterranean fruit fly. Currently areas recognised free of Mediterranean fruit fly are the Ord River Irrigation Area and the states of Queensland, New South Wales, Victoria, the Northern Territory, and Tasmania.

As cucumber fruit fly is the only RG3 pest listed for **watermelons,** this commodity can be exported under this appendix from all areas in Australia.

2.13 Appendix 12 – Irradiation

Mangoes, lychees and papayas may be exported under this treatment pathway.

The minimum treatment rate specified by MAF for mangoes and lychees exported from Australia is Dmin 250Gy. This minimum irradiation rate is deemed to be effective for those fruit flies and regulated arthropods within the commodity pest listings for mangoes and lychees (see Attachment 1).

An alternate minimum treatment rate of 350 Gy has also been approved for mangoes and lychees. The application of 350 Gy may be deemed as effective for arthropods not listed on the regulated mango and lychee pest lists but determined to be regulated by MAF. The effectiveness of 350 Gy for other regulated arthropods, will be subject to irradiation efficacy data for the pest intercepted. Collating this information could result in delays.

Should efficacy data not be on file for other regulated arthropods irradiated at 350 Gy, other corrective/treatment actions may need to be instigated prior to AQIS endorsing the consignment or MAF releasing the consignment should the pest interception be encountered upon arrival in New Zealand.

The minimum treatment rate specified by MAF for papaya exported from Australia is Dmin 150Gy. The 150 Gy treatment for papaya is accepted by MAF as an effective treatment for fruit fly pests. However if this rate is chosen then effective in field management practices must be undertaken for *Conogethes punctiferalis* (yellow peach moth) prior to export.

A treatment option for irradiation at 250 Gy is also available for papaya. The 250 Gy treatment option has been accepted by MAF as effective against those regulated arthropod pests listed specifically for papayas.
The Food Standards Australia & New Zealand (FSANZ) standard for irradiated tropical fruits has a Dmax of 1000Gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au

SECTION 3 GROWER RESPONSIBILITIES

3.1 Summary

Treatment Pathway	Commodity	Requirement

Appendix 2 Area Freedom	Avocadoes	Growers must register with AQIS to maintain field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Capsicum	Growers must register with AQIS for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Grapes	Growers must register with AQIS to maintain field controls for the RG 2 pest *Conogethes punctiferales*. AQIS will certify southern state grapes area free for the RG 2 pest *Maconellicoccus hirsutus*
	Other	Growers are not required to register with AQIS for export under this treatment.
Appendix 3 Fumigation	Strawberries	Growers are not required to register with AQIS for export under this treatment.
	Watermelons	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production
Appendix 4 Dimethoate	Capsicums	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production and also for the control of RG 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Cucumbers, Honeydews, Scallopinis, and Tomatoes	Growers must register with AQIS under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 5 Cold Treatment	Avocadoes	Growers must register with AQIS to maintain field controls for the RG 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Citrus	Queensland growers must register with AQIS to maintain field controls for the RG 2 pest *Guignardia citricarpa* (citrus black spot). Other state departments survey for citrus black spot, negating the need for grower registration.
	Grapes	Growers must register with AQIS to maintain field controls for the RG2 pest *Conogethes punctiferales* (yellow peach moth). AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus (hibiscus mealybug).
Appendix 6 Non Host	Pineapples	Growers are not required to register with AQIS for smooth cayenne variety pineapples under this treatment. Growers must keep records verifying smooth cayenne parentage.
	Bananas	Growers are required to register with AQIS to maintain field controls for the high impact non fruit fly pest *Maconellicoccus hirsutus* (pink hibiscus mealy bug).Unless opting for mandatory fumigation.
Appendix 10 In field controls	All commodities	All commodities which require Appendix 10 (In field controls for fruit fly) must be registered.
Appendix 11 Winter window	Rockmelons, honeydew melons, cucumbers, watermelons zucchinis and scallopinis	Growers must register with AQIS under Appendix 11 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 12 Irradiation	Mango & Lychee	Growers are not required to be registered under this pathway
	Papaya	If exporters intend to irradiate at 150Gy growers must register for the control of the high impact non fruit fly pest *Conogethes punctiferales*.

3.2 General requirements

Growers of commodities requiring registration must maintain spray diaries and implement field hygiene requirements that demonstrate appropriate management and recording for those pests listed as RG2 and RG3 in the pest lists (Attachment 1).

3.3 Registration

Application for registration (Attachment 2.1) will be made to the AQIS office in the grower's region. To ensure there are no delays with processing and completing registrations it is recommended that applications be forwarded to AQIS no later than 6 weeks prior to export. Applications are processed in order of receipt; late applications may be subject to delays. Applications must include a property map identifying blocks on which the relevant NZ BQA commodities are grown.

Growers may apply direct to their regional AQIS office or to the packhouse they are supplying. Packhouses must forward any grower applications through to AQIS as soon as possible for inclusion on the regions "master" grower/packer list.

Once application for registration is received regional AQIS staff will organise a time to visit the property to conduct a preliminary audit. During the visit the inspector will ensure the grower(s) are aware of their responsibilities under the SOM, check relevant documentation eg spray diaries, conduct an inspection of the property (registered blocks), and will allocate a grower registration number.

Growers that have previously registered under this arrangement in the previous season without non conformance will not require an AQIS visit prior to export commencement. However, an audit must be performed early in the season.

NOTE: **In the above circumstance, growers MUST notify AQIS of their intent to commence export at least 6 weeks prior to export. Growers must provide evidence that required control measures have been carried out (eg spray diaries). If AQIS approval is granted, a time for an audit visit will be organised. Failure to comply with these directions may mean growers, irrespective of previous participation, will require an "initial audit" before being allowed to commence export.**

3.4 Orchard responsibilities

Growers must apply recommended field controls a minimum of 4 weeks prior to commencement of harvest. Field monitoring and spray diary records must be kept for all activities relating to registered blocks. The applicable grower declaration form (Attachments 2.13, and 2.14) for the product must be completed and accompany each consignment of product intended for export.

NOTE: the Queensland Department of Primary Industries (QDPI) previously issued a farm note (F76/DEC92) which detailed requirements for field control programs against infestation of *Bactrocera cucumis*, these constituted the minimum requirements for the control of fruit fly. This farm note is no longer in print but the requirements are still accepted by AQIS. Newer chemicals developed and registered for the control of fruit fly may be utilised. All spray programs to meet AQIS requirements must be carried out at the recommended label rates. All activities relating to field controls must be recorded and held on file for a 12 month period.

Growers are permitted to use the services of a state registered crop monitor. Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered grower. Records including spray regime and recommendations must be available to AQIS upon request.

NOTE: All cartons of produce must be marked with some form of grower and packhouse identification to enable traceback.

3.4.1 Citrus growers

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer) — however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the southern states of New South Wales, Victoria and South Australia are not specifically required to be registered for this program, monitoring and spray diaries must be kept.

3.4.2 Avocado growers

All avocadoes must be sourced from growers and blocks registered with an official tree certification scheme (such as the Avocado Nursery Voluntary Accreditation Scheme or relevant state departments) to ensure freedom from avocado sun blotch viroid and undergone appropriate pest control activities that are effective against or been sourced from an area free (verified by an official detection survey) from cercospora spot blotch (*Pseudocercospora purpurea).*

In addition to the standard grower requirements listed in Section 3.3, avocado growers must supply the following documented evidence for registration:

- grower maps to include indexed and non-indexed fruit;
- official verification of orchard freedom from sun blotch viroid;
- sterilisation procedures between indexed and non-indexed blocks;
- buffer zone/s between indexed and non indexed blocks (i.e. row spacing between blocks); and
- pruning procedures to prevent sun blotch viroid re-infestation (i.e. no foliage or fruit contact with soil or neighbouring avocado trees)

NOTE: Further details on avocado accreditation for sun blotch viroid can be sourced from the Australian Avocado Growers Association or State Government Departments of Agriculture (or equivalents).

3.5 Audits

AQIS will audit growers to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency*

Growers will receive an initial audit prior to season commencement (or early in export season if previously registered subject to conditions above) and one further audit during the season.

For tomatoes and winter window commodities, AQIS will undertake monthly audits of the property throughout the growing/harvesting season in the initial season (where substantial compliance is recorded then audit frequency will be reduced to 2 monthly intervals).

AQIS will conduct audits of registered growers throughout the growing/harvesting season. All audits of growers will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

NOTE: the AQIS audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure the requirements of the new

treatment are being met, and to identify any problems or potential problems with implementing the treatment.

All AQIS audits will be "announced" giving the grower at least two days notice.

Unannounced monitoring audits may be conducted if they are deemed necessary by the Regional Export Manager. Unannounced monitoring audits are not chargeable unless major non-conformances are detected.

AQIS audits of grower responsibilities may be conducted simultaneously with packhouse and/or exporter audits.

NOTE: Where a grower elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

3.5.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A grower found to be not managing orchard/s in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

The timing of the follow up audit is dependent on the problem and its relationship to growing/harvesting of the current crop. AQIS inspectors will determine if follow up audits are required.

3.5.2 Packhouse Approved Arrangement systems

Where a packhouse has an Approved Arrangement (AA) with AQIS and is packing a commodity for which grower registration is required, the packhouse must register and audit growers in the following manner:

. on initial registration;
. following registration at least once during the growing season; and
. in subsequent seasons once during each growing season.

During AQIS auditing of AA establishments, a sample of registered growers will be reviewed for compliance with the requirements of the SOM. If a major non-conformance is detected, the suspension of the packhouse may be considered necessary as it is the packhouse that is responsible for ensuring compliance with AQIS/New Zealand requirements. AQIS audits of growers registered by the packhouse will be conducted on the following basis:

. in the initial year of registration – 5% of all growers;
. subject to compliance the previous year – 2½% of all growers;
. in non-conformances were detected at a previous audit – increase random selection of growers to 10% of all growers.

3.5.3 Security and supervision

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

SECTION 4 CROP MONITOR RESPONSIBILITIES

4.1 Registration

Crop monitors must register with AQIS (Attachment 2.4) to undertake crop monitoring duties for the NZ BQA.

A crop monitor will include in their application, details of relevant registered growers and the commodities covered.

4.2 Audit

Crop monitors will provide registered grower property records upon AQIS/MAF request. AQIS will perform random audits of each registered crop monitor at least once per year/season for each commodity field monitoring service provided. Audits will include randomly selected growers.

If three growers (minimum) are covered by the same crop monitor, and audits reveal substantial compliance, additional grower audits of the crop monitor may be waived by the Export Manager for that year/season.

All audits of crop monitors will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

Where a crop monitor elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect.

4.3 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A crop monitor found to be not managing responsibilities in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

SECTION 5 PACKHOUSE RESPONSIBILITIES

5.1 General requirements

Packhouses are required to maintain secure conditions for NZ BQA commodities and have documented systems in place to ensure grower identification and segregation is maintained.

All cartons must be marked with a standard trade description in accordance with the *Export Control (Plants and Plant Products) Orders 2005* and some form of grower and packhouse identification.

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, packhouses (where applicable) must be registered specifically for New Zealand. Application for registration (Attachment 2.2) will be made directly to AQIS regional offices.

5.2 Documentation

Packhouses are responsible for maintaining all documentation and must provide to AQIS the following upon request:

i. copy of AQIS endorsed packhouse registration form;
ii. list of growers registered with AQIS who supply to the establishment;
iii. where grower registration is a requirement, a copy of AQIS endorsed grower registration forms;
iv. receival/despatch records of produce from individual growers; and
v.

Export documentation will be held on file for 2 years (minimum) and are subject to AQIS/MAF audit.

5.3 Delegation of exporter responsibilities

5.3.1 General

Where a packhouse has been delegated exporter responsibilities in accordance with directions contained in the SOM, the packhouse must undertake and record all functions delegated to them. Delegated responsibilities may include:

. the security of cleared/treated produce whilst on premise;

. supervision of loading and unloading of all consignments into and out of the packhouse premise;

. clear identification of all New Zealand destined produce;

. documenting all incoming and outgoing produce intended for export under the NZ BQA; and

. inspections.

Packhouses will be audited to ensure requirements for these functions are known.

5.3.2 Security and supervision

The exporter delegate (ED) will arrange appropriate transportation of treated products to ensure no cross infestation or substitution can occur.
Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to Export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by AQIS.

5.3.3 Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand, a copy of grower line inspection records must be presented to staff at the time of AQIS inspection.

Exporter inspection may be undertaken at a packhouse when delegated. See Section 7.2 for more details about exporter delegate inspections. A packhouse inspection will satisfy requirements for an exporter inspection if performed by an approved ED. Inspections must be recorded (refer to Attachment 2.6) and retained for audit purposes. A copy of the inspection record must accompany the consignment to the AQIS inspection.

If the exporter (or exporter delegate) opts for AQIS to carry out a consignment line inspection, then copies of grower line inspection records must be presented to staff at the time of AQIS inspection.

5.4 Audit

AQIS will audit packhouses to ensure compliance with NZ BQA requirements. Details of these audits can be found in *Table 7 – Audit Frequency.*

Grower registers, staff training, completion and storage of records and security responsibilities will be audited by AQIS. Variance to audit requirements can be made at the discretion of the Export Manager.

AA packhouses will be audited for compliance with the NZ BQA as per the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP

All audits of packhouses will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

AQIS audits of packhouse responsibilities may be conducted simultaneously with grower and/or exporter audits.

NOTE: Where a packhouse elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

5.4.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A packhouse found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

5.5 Approved Arrangements – Packhouse

5.5.1 General requirements

The following activities must be undertaken by AA packhouses:

(a) All individual packages must include grower numbers or equivalent codes and packhouse numbers.

(b) Declared fruit fly free area packhouses must have a register of all growers' names and addresses and allocated grower numbers for all NZ BQA commodities.

(c) Should area freedom suspension zones be established, packhouses must be able to provide separate registers showing growers who are still in area freedom districts against those who are located within the suspension zone/s. Establishment Quality Manuals are required to show procedures for identification, segregation and packing processes to ensure "area free" commodities cannot be contaminated whilst on the establishment and/or surrounds.

(d) It is recommended contingency plans are incorporated within quality manuals to address additional procedures required in the event of fruit fly outbreaks. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

(e) Packhouses not undertaking official disinfestation treatments and that do not have Risk Group 2 or 3 pests; will not need to include additional systems to their Quality Manuals.

(f) Packhouses with Risk Group 2 or 3 pests will need to ensure grower registration, commodity segregation; identification and inspections meet the NZ BQA. It is likely some quality manuals will need to be amended or have attached an appendix to meet the new export requirements for NZ BQA.

(g) To gain accreditation, five joint inspections will be undertaken with AQIS to assess the ability of packhouse staff to perform inspections in accordance with the directions contained in the SOM.

AA packhouse conducting "treatments" under the NZ BQA must be registered for this purpose in addition to normal registration requirements. Section 4.7 of the SOM outlines the requirements for Treatment Centres.

5.5.2 Audit

AA packhouses with NZ BQA responsibilities incorporated into their current Quality Manuals will be audited in conjunction with standard auditing requirements.

Those choosing to separate NZ BQA commodity responsibilities from other AA accreditation will have the two systems audited separately but within the usual audit schedules applying to the establishment.

Establishments with RG 2 pests will have a percentage of those registered growers audited to ensure compliance with the NZ BQA.

Packhouses who elect to register growers of commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. On initial registration,
. Following registration, at least once during the growing season; and
. Continual registration- once during each growing season.

For AQIS audits, registered growers will be randomly selected on the following basis;

. Initial year of registration - 5% of all growers registered by the packhouse
. Subsequent growing seasons- 2.5% of all growers registered by the packhouse (subject to compliance from previous year)
. Non-conformance at a previous audit -10% of all growers registered by the packhouse

Should a major non-conformance be detected at audit, the packhouses will be suspended from the New Zealand program immediately. Depending on the type of non-conformance, suspension from the AQIS AA may be considered. Such a decision will be made by the AQIS AA Contact Officer in conjunction with the State Regional Manager and Canberra Office.

5.5.3 Inspection requirements

AA packhouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted when the AA establishment has systems in place that;

. Address grower field controls (horticulture extension officers, reference to crop monitors etc.)
. Have some type of formal receival inspection records
. Have sorter and grader recording systems within the processing line.

In order to properly document inspections for NZ BQA commodities, AA packhouse will undertake “in-line” consignment inspections according to the following table;

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 3 sets out sampling regimes that can be applied as in-line process controls within an AA packhouse. The maximum continuous time run for New Zealand is a 24 hour process. It is extremely important this type of in-line process control is undertaken and recorded for each consignment run of NZ BQA commodities.

All in-line process controls (Table 3) must be undertaken by an AQIS Approved Inspector. Where inspections are performed as per Table 3, individual grower line inspections are not required.

During inspection, any fruits/vegetables that are soft, bruised or display rot spots will be cut to determine evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all produce cut will be recorded on the inspection sheets.

Packhouse can make up any type of sampling system based on Table 3. **However**, packhouse must document what regime is to be used before the initial production run and ensure the sampling regime is representative of the consignment/s being assembled.

Packhouse requirements pertaining to identification, segregation, security and records for all NZ BQA produce must be part of the Process Management System submitted for AQIS approval.

NOTE: Packhouses will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

5.5.4 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers will be included on all packages covered by the NZ BQA.

For produce being transferred intrastate or interstate, documentation will be required to ensure the receiving company and AQIS inspector can verify security and integrity of the consignment on arrival. A declaration to the following effect will be made on the “EX 222”or internal transfer note as follows:

"The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by MAF and specified tolerances have not been exceeded."

Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

5.5.5 Post treatment security

Where an AA packhouse has accepted exporter delegation for the security and loading supervision of NZ BQA commodities, the packhouse will nominate the person/s who will be responsible for carrying out and recording the following:

. The security of cleared/treated produce whilst on the premises

. Supervision of loading and unloading of all consignments into and out of the premises intended for export under NZ BQA

. Clear identification of all NZ BQA produce

. Documenting all incoming and outgoing produce intended for export to New Zealand

The exporter/ED will arrange appropriate transportation of certified NZ BQA products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of acceptance of duties on file.

For product not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export (Ex 28) and signed by an AQIS inspection officer.

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES

6.1 General requirements

Treatment centres must have documented systems of identification, segregation, process controls, post security treatment and supervision responsibilities.

All staff must be appropriately trained to carry out designated responsibilities.

6.2 Registration

In addition to normal AQIS registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, all treatment centres must be registered (Attachment 2.3) specifically for New Zealand. Application for registration will be made directly to AQIS Regional Offices.

6.3 Audit

AQIS will audit treatment facilities to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency.*

Product identification, calibration, load out activity, completion and storage of records and security responsibilities will be audited by AQIS. Records pertaining to these aspects will be checked for accuracy at audit. Variance to audit requirements can be made at the discretion of the Export Manager.

All audits of treatment facilities will be charged at standard fee for service rates, these details are available from AQIS regional offices or www.aqis.gov.au\export.

AQIS audits of treatment facility responsibilities may be conducted simultaneously with grower and/or exporter audits.

NOTE: Where a treatment centre elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

6.3.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A treatment centre found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

6.4 Post treatment security

6.4.1 Registration

The exporter must nominate, in their application for registration (Attachment 2.5), the person/s who will be responsible for carrying out and recording the following:

- security of treated produce whilst on the premises;
- supervision of loading and unloading of all consignments into and out of the premises;
- identification and segregation of consignments intended to be treated; and
- documenting all incoming and outgoing produce intended to be exported to New Zealand.

6.4.2 General requirements

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment

Staff loading containers will ensure minimum time delays in moving commodities from the secure area into container/s. Product should not be left in an unsecured environment for more than 15 minutes.

Approved security measures for transporting of produce will include either;

. Full shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet),

. Full enclosure of each pallet with shade mesh cloth with a maximum opening of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),

. Loading direct into panotech vans with units sealed by AQIS officers

. Cool storing unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and any untreated product (except commodities treated under area freedom)

. Cool storing protected in secure packages at any temperature (except commodities treated under Area freedom)

Should any treatment operator/packhouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Export Manager for assessment and approval.

6.5 Post treatment transportation

The exporter/ED will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

Products transported to another destination for export loading must be subject to strict security provisions. The exporter/ED will ensure the transport medium is clean and other products (i.e. untreated/non-secure commodities), that could cause cross infestation are not loaded without taking appropriate security precautions. That is, either the other commodities are secured or the New Zealand produce is secured (as per Section 6.4.2).

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by AQIS.

NOTE: Export Managers may approve variations to the above documentation requirements to suit a particular state's operations. The use of facsimiles for transferring this information is permitted. Where other than official AQIS documentation is used, it is recommended audits be undertaken frequently to enable confidence within the systems.

Should inspecting officers find breaches to security during transit; consignments will be rejected. For some commodities reconditioning and re-inspection may occur.

AQIS will audit load out facilities to ensure compliance is being maintained.

6.6 Treatment Appendices

6.6.1 Appendix 3 – Fumigation

Fumigation practices must be carried out in accordance with the AQIS Methyl Bromide Standard – Verson 1.4. The Standard contains details for effective fumigation procedures and can be found on the AQIS website. http://www.daff.gov.au/data/assets/pdf_file/0010/734464/mbr-standard.pdf and via the link on the Phyto database website.

All fumigations must be performed with the amount of product space equal to or less than 50% of total air space within the chamber/tent. Fumigation treatment requirements are detailed in Table 4.

Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21 - 26°C and above	32g/m^3	Watermelon - 4 hours
15°C and above	48g/m^3	Strawberry - 3 hours

Treatment facilities must maintain documented systems. Systems will include:

1. Incoming product identification.
2. Segregation from other produce and clearly marked “New Zealand”
3. Treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment (i.e. batch numbers)
4. Treatment records
5. How measuring equipment is calibrated, how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.

It is recommended individual procedures accompanied by work instructions be written to define the processes and controls. The following criteria should be considered:

- Address how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent,
- Define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.
- How many units will be sampled to measure lowest flesh temperature of product?
- If tent fumigation is being performed, by whom and when is the tent checked for holes/tears?
- Who, how and when is temperature measuring equipment calibrated? How is this recorded?
- Where the in-process gas monitoring lines are located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?
- Who checks required fumigation dosage rate once temperature and volume are calculated?
- How is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?
- Who is responsible for checking the correct amount of fumigant is entered into the chamber/tent?
- What procedures are applied to ensure no leaks from the chamber or tent are evident?
- What period of time after initial fumigant is released into the chamber/tent will verification readings be made and using what type of equipment?
- Calibration of gas measuring equipment is undertaken how frequently and who does this?
- Calibration details are recorded where?
- At completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?
- Who has the authority to sign off the treatment certificates to enable release of produce?
- How is product identified as being treated?

NOTE: Regional Export Managers may approve variations to the above documentation requirements to suit a particular state's operating requirements.

6.6.1.2 AQIS Supervision

- Flexible tents- AQIS inspection staff will attend all fumigations being undertaken for NZ BQA. Inspection staff will attend either at commencement of fumigation or prior to completion. AQIS will verify treatment dosages, calculations and gas retention general process controls.

- Fixed capacity (chambers or fixed tents)-Treatment centres will be supervised at the commencement of the season, and then, providing substantial compliance is attained 2 - 3 times during the season.

Fumigation centres must advise their regional AQIS office 24 hours in advance of intended fumigation treatments. If AQIS is unable to attend at the required times, arrangements can be made to allow treatment to go ahead but define how AQIS will manage the supervision requirements.

NOTE: After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.2 Appendix 4 – Dimethoate

6.6.2.1 General requirements

Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES

Commodity	Dip strength	Tolerance	Dip/spray	Time
Tomato	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Tomato	400ppm	±6% (±24ppm)	Spray	Spray for at least 10 seconds, and remain wet for at least 1 minute
Capsicum	400ppm	±6% (±24ppm)	Spray	Spray for at least 1 minute
Zucchini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Rockmelon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Cucumber	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Scallopini	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute

Note: The minimum tolerance for dimethoate sample results is 376ppm. Treatment centres will be suspended if samples fall below this level. Treatment centres will only be re-instated once an audit has been conducted to identify the cause of the low concentration. Adequate corrective actions must be documented and instigated by the treatment facility. Reinstatement will occur when AQIS has confirmed the adequacy of corrective actions and when AQIS is in receipt of a conforming dimethoate sample.

Treatment facilities must maintain documented systems. Systems will include:

- Chemical to must be used by expiry date;
- Chemical to be stored at temperatures below 40°C. It has been determined when temperatures rise above 46°C (for even 1 day), the active ingredient will degrade;
- That professional advice (laboratory/manufacturer) has been sought, if using any additives to solution, as these can accelerate the degradation of the active chemical concentrate over time;
- Procedure that ensures that pH levels are checked and adjusted if required, before adding chemical concentrate, as alkaline conditions have an adverse effect on the solution and will increase with time;
- All products will be free of soil;
- The treatment must be the last process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted;
- The treatment centre will nominate a person/s to prepare and record each consignment or batch lot;
- The treatment centre will prepare treatments immediately prior to use and have systems in place for recording solution strengths. The treatment centre will also record details of the mixing of solution and any topping up during processing which allows for chemical wash out. Details will include times and indicate volumes of product treated at the time of topping up.

Each treatment operator will be required to document their method/s of dipping and must include:

- Size of the dip tank

- Method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc)
- Maximum volume of water required for any/each treatment
- Amount of chemical needed to achieve the required ppm level active ingredient
- Minimum allowable solution level
- Maintenance of active ingredient level (i.e. "top up" levels)
- Treatment operators will have a system in place identifying treated and untreated products. Labels must be clear and visible on pallets/bins/crates etc
- After dipping, all products must be identified as being "treated".

NOTE: Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems demonstrating solution can be carried over without losing efficacy.

After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.2.2 Waxed produce

The application of waxes or oils prior to dimethoate treatment is prohibited. For treated produce, application of waxes or oils will only be allowed at the discretion of the Export Manager.

6.6.2.3 Sampling

Due to the range of commodities exported under this appendix and their seasonal availability, all sampling regimes within the NZ BQA will be applied within the context of a calendar year (Jan – Dec).

All industry dip samples must be taken at the end of a dipping run. AQIS samples where possible (subject to operational constraints), will also be taken at the end of a dipping run. This will provide assurances that all product within the dipping process has been exposed to a solution within the required concentration.

There is no requirement for AQIS inspectors to attend each dimethoate disinfestation treatment. Analysis of chemical dipping strengths, must be verified according to the following sampling guidelines:

AQIS sampling
Initial year of registration: AQIS to be in attendance during the preparation of the first dipping solution. An AQIS dip sample will be taken from this first treatment run. AQIS dip samples must be taken during every month thereafter, while the treatment facility is dipping for export to New Zealand.

Continuous registration: Sampling may be extended to twice during dipping activities in a calendar year, provided that substantial compliance has been previously established.

Industry sampling
Monthly for the first 3 months of export activity, with one additional sample to be taken if the treatment period is greater than 4 months.

6.6.2.4 AQIS audit

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season.

First year of registration: Monthly during the treatment season.

Continuous registration without non-conformance: Twice during the treatment season.

6.6.3 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand.

6.6.3.1 General requirements

Exporters have the option to carry out cold disinfestation treatments on-shore immediately prior to export or in-transit in accordance with the following treatment schedules:

Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS

Commodity	Fruit Pulp Temperature	Period
Pear, tablegrape, citrus fruits (option 1)	≤ 0°C	13 days
Pear, tablegrape, citrus fruits (option 2)	1°C (± 0.6°C)	16 days
Avocadoes	1°C (± 0.2°C)	16 days

6.6.3.2 Citrus treatment options during fruit fly outbreaks within area freedom districts

If due to a Queensland fruit fly (*Bactrocera tryoni*) or Mediterranean fruit fly (*Ceratitis capitata*) outbreak, AQIS is not able to certify fruit fly area freedom for citrus sourced from districts outlined within Appendix 2 where area freedom from specific species of flies has been established, the following cold disinfestation treatment schedules may apply:

Table 7 – CONTINGENCY TREATMENT OPTIONS DURING MEDITERRANEAN FRUIT FLY OUTBREAKS WITHIN AREA FREEDOM DISTRICS

Commodity	Fruit Pulp Temperature	Period
Lemon only (option 1)	2 °C (± 0.5°C)	16 days
Lemon only (option 2)	3 °C (± 0.5°C)	18 days
Grapefruit, Mandarin, Orange, Tangerine & Tangor (option 1)	2 °C (± 0.5°C)	18 days
Grapefruit, Mandarin, Orange, Tangerine & Tangor (option 2)	3 °C (± 0.5°C)	20 days

Table 8 – CONTINGENCY TREATMENT OPTIONS DURING QUEENSLAND FRUIT FLY OUTBREAKS WITHIN AREA FREEDOM DISTRICTS

Commodity	Fruit Pulp Temperature	Period
Lemon and Grapefruit	3 °C (± 0.5°C)	14 days
Mandarin, Orange, Tangerine & Tangor (option 1)	3 °C (± 0.5°C)	16 days

NOTE: Alternate treatment options outlined in Table 7 - 8 apply only to citrus originating from the Riverina – MIA; Sunraysia – Victoria and New South Wales; Riverland – South Australia; Ord River Irrigation Area – Western Australia and the Shepparton Irrigation Region - Victoria districts.

6.6.3.3 Temperature recorders

Fruit pulp temperature recorders used for cold treatment must conform to the following requirements:

- able to accommodate the required number of sensors;
- able to record and store data for the duration of each treatment until such time the information can be examined by the appropriate authority;
- capable of producing, or can download the information to produce, printouts which identify each sensor, time and temperature, as well as the identification of the recording unit facility/container number where the treatment was undertaken;
- capable of recording readings at least hourly and identifying the time of recording;
- capable of recording temperature data in increments of 0.1°C

6.6.3.4 Calibration of Temperature Sensors

The calibration of sensors will be conducted using a slurry of crushed ice and distilled water. At least one minute intervals between two consecutive sensor readings must be allowed during the calibration process; however these intervals must not exceed 5 minutes.

Any sensor which reads outside of the range of ± 0.6 °C from 0°C must be replaced by a sensor that meets this criterion.

Calibration of temperature sensors must be carried out under the supervision of AQIS, with results recorded on Form 2.15 - NZ Fruit Sensor Record of Calibration.

6.6.3.5 Loading of containers

Containers must be inspected by AQIS or an authorised load out person prior to loading to ensure freedom from pests and to verify that all vents or other potential entry points for pests are covered. Authorised load out persons must record this container check on Form 2.12 Container Report Sheet.

Containers must be fitted with a tamper proof numbered seal placed on the container door upon completion of loading. The seal number must be noted on the Phytosanitary certificate.

6.6.3.6 On-shore cold treatments

On-shore cold treatments are only permitted to be undertaken at treatment facilities registered by AQIS under the NZ BQA. AQIS will maintain records of all establishments registered for cold disinfestation.

All staff must be appropriately trained to carry out designated responsibilities.

6.6.3.6.1 Placement of fruit pulp temperature sensors

A minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of product or less. For each additional 250 cu.m. of product, or part thereof, one additional pulp sensor will be used;

- The warmest area of each cool storage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One pulp sensor will be placed at the warmest area of the cool store. Further sensors will be placed throughout the load in locations representing different areas of the cool store, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors;
- Care must be taken to ensure that the tip of the fruit pulp temperature sensors are not allowed to extend outside of the fruit

6.6.3.6.2 AQIS supervision

Calibration of sensors for on-shore cold disinfestations must be carried out prior to commencement of treatment and at completion of treatments, with both calibrations supervised by AQIS.

If as a result of re-calibration, any sensor produces a different reading than during the initial calibration, a correction factor will have to be taken into consideration when interpreting treatment read-outs. If the application of a correction factor leads to treatment parameters not having been met, the treatment will be deemed to have failed.

Where a treatment has failed, fruit may be re-treated at the discretion of AQIS and industry. In circumstances where AQIS has documented confirmation that the conditions of the treatment schedule have been maintained since treatment cessation, the treatment may be allowed to continue. Data collection must continue from the time of reconnection of the recording device.

The treatment will be deemed to have begun by AQIS once the chamber has stabilised and all sensors have attained the required treatment temperature.

For cold storage centres using manual recording devices, AQIS inspection staff will supervise the disinfestation treatment every 3-4 days.

AQIS will verify, stamp and sign satisfactorily completed treatment records. Both AQIS and the treatment facility are to maintain copies of the treatments on file.

6.6.3.6.3 Record Requirements

Temperature records will be retained and made available for auditing purposes by AQIS/MAF upon request, details of records must include:

- Date and results of sensor/probe calibrations
- Date chamber was loaded with produce
- Type and variety of produce treated, the quantity by lots involved, all to be identified by grower, packhouse and exporter
- Either continuous print out records or daily records of a.m. and p.m. temperatures within the chamber throughout the treatment program
- Date produce was cleared from chamber with details of post treatment security and dispatch of produce
- Date and results of re-calibration of sensors following completion of treatment
- Continuous - strip charts or data log sheets for each cold treatment
- All treated product must be labelled as treated to ensure traceability

Temperature records will be retained and made available for auditing purposes by AQIS/MAF upon request.

NOTE: After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.3.7 In-transit cold treatments

In-transit cold disinfestations treatments may only be carried out in self refrigerated (integral) shipping containers. These containers must be capable of achieving and maintaining the required cold disnfestation schedules in accordance with the BQA SOM.

6.6.3.7.1 Placement of temperature sensors

Containers must be packed in a manner which ensures that there is even airflow under and around all pallets and any loose stacked cartons. Care must be taken to ensure that the tip of the fruit pulp temperature sensors, are not allowed to extend outside of the fruit.

Records of fruit pulp temperatures are required from at least three locations. Sensors will be placed into average sized fruits under AQIS supervision as follows:

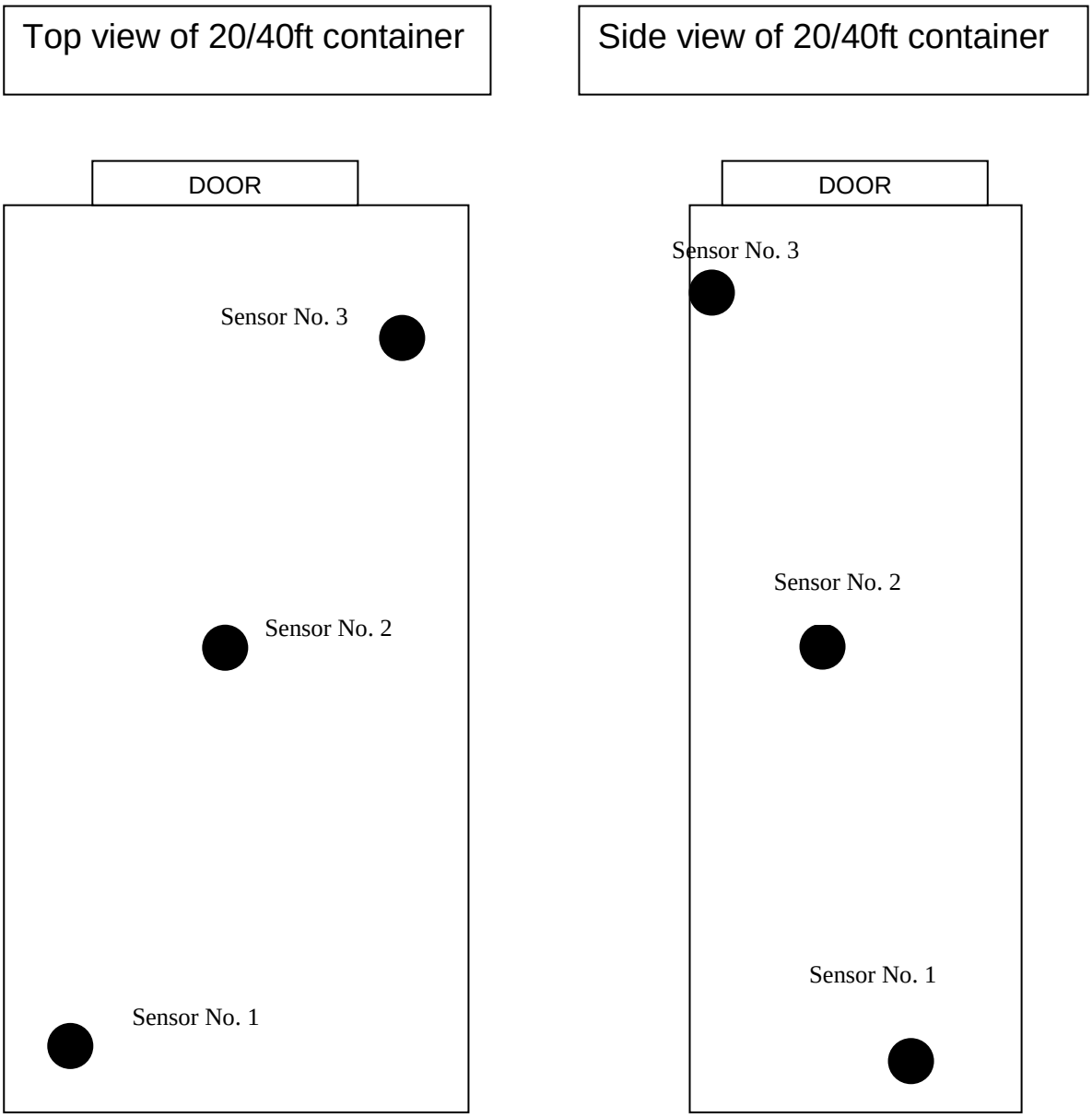
- The sensors must be placed in the following locations in a 40 foot container:
  - Sensor No 1: 1st pallet row, 2-3 cartons down from top, 2-3 cartons in from right side
  - Sensor No 2: 5th pallet row, 4-5 cartons down from top, 3-4 cartons in from left side
  - Sensor No 3: 9th pallet row, 6-7 cartons down from top, 2-3 cartons in from left side.

- The sensors must be placed in the following locations in a 20 foot container:
  - Sensor No 1: 1st pallet row, 2-3 cartons down from top, 2-3 cartons in from right side,
  - Sensor No 2: 3rd pallet row, 4-5 cartons down from top, 3-4 cartons in from left side,
  - Sensor No 3: 5th pallet row, 6-7 cartons down from top, 2-3 cartons in from left side.

On completion of treatments, printouts (or electronic equivalent) of all temperature sensors will be made available to the MAFBNZ officer at the port of arrival for final clearance of the container.

Attachment to section 6.6.3.7.1

SCHEMATIC VIEW OF PLACEMENT OF TEMPERATURE PROBES FOR IN-TRANSIT COLD TREATMENT OF FRUIT FLY HOST COMMODITIES FOR EXPORT TO NEW ZEALAND



NOTE: Any container openings must be covered or fitted with fruit fly proof mesh to prevent the entry of pests. Mesh or gauze with openings ≤ 1.6 mm is acceptable.

6.6.4 Appendix 12 – Irradiation

The minimum treatment rate specified by MAF for mangoes and lychees exported from Australia is Dmin 250Gy.

The minimum treatment rate specified by MAF for papaya exported from Australia is Dmin 150Gy. New Zealand MAFF requires Australia to undertake appropriate pest control activities for the *Conogethes punctiferalis* (yellow peach moth) if 150 Gy irradiation rate is applied.
A treatment option for irradiation at 250 Gy is also available for papaya. The 250 Gy treatment option has been accepted by MAF as effective against those regulated arthropod pests listed specifically for papayas.

Refer to Section 2.13 Irradiation Appendix of SOM for further information.
The Food Standards Australia & New Zealand (FSANZ) standard for irradiated tropical fruits has a Dmax of 1000gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au

Treatment centres will be required to carry out verification testing to determine the required response on target organisms has been achieved in accordance with International Standard Phytosanitary Measures (ISPM) # 18 - *Guidelines for the use of irradiation as a phytosanitary measure* (www.ippc.int). The records of this verification must be made available to AQIS/MAF upon request.

Ionizing radiation may be provided by radioactive isotopes (gamma rays from cobalt-60), electrons generated from machine sources (up to 10 MeV), or by x-rays (up to 5 MeV) (limits set by Codex Alimentarius). The unit of measurement for absorbed dose is gray (Gy).

Treatment procedures must ensure the minimum absorbed dose (Dmin) is fully attained throughout the commodity to provide the prescribed level of efficacy. Owing to the differences in the configuration of treatment lots, higher doses may be required to ensure the Dmin is achieved throughout the configured consignment or lot; these doses must not exceed the Dmax.

NOTE: After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.4.1 Dosimetry

Dosimetry ensures the required Dmin for a particular commodity was delivered to all parts of the consignment. The following conditions for dosimetry systems must be in place:

- Capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax)
- Calibrated in accordance with international standards or appropriate national standards (ISO/ASTM 51261 "Selection and Calibration of Dosimetry Systems for Radiation Processing", ISO/ASTM 51204 "Dosimetry in Gamma Irradiation Facilities for Food Processing" and ASTM guide - F1355 "Irradiation of Fresh Fruits as a Phytosanitary Treatment", and ISPM 18)
- Appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
- Evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
- Consider variations due to density and composition of the material treated, shape and size,

orientation of the product, stacking, volume and packaging;

- Dose mapping of the product in each geometric packing configuration, arrangement and product density used during routine treatments must be carried out prior to the approval of the facility. Only configurations approved by AQIS can be used for actual treatments;
- All components of the dosimetry system must be calibrated according to documented standard operating procedures. An independent organisation recognized by AQIS should assess performance of the dosimetry system;
- An accurate measurement of absorbed dose in a consignment is critical for determining and monitoring efficacy and is part of the verification process. The required number, location and frequency of these measurements should be prescribed based on the specific equipment, processes, commodities, relevant standards and phytosanitary requirements.

6.6.4.2 Dose Mapping

- Dose mapping studies must be conducted to fully characterize the dose distribution within the irradiation chambers and commodity, and demonstrate the treatment consistently meets the prescribed requirements under defined and controlled conditions. Dose mapping data from a minimum of three runs on any particular configuration must be provided to AQIS for verification of Dmin points etc. A minimum of three runs in a physical configuration is required for verification of Dmin (standard).
- Dose mapping must be done in accordance with documented (proven) standard operating procedures. The information from the dose mapping studies is used in the selection of locations for dosimeters during routine processing.
- Independent dose mapping for incomplete (partially-filled) as well as first and last process loads is required to determine if the absorbed-dose distribution is significantly different from a routine load and to adjust the treatment accordingly.

6.6.4.3 Facility records and traceability

Treatment facility operators must keep and maintain records addressing the areas listed below.

- Appropriate treatment records for phytosanitary purposes must be kept by the irradiation facility to ensure traceability of treated lots. Records for every treatment must be kept.
- Dosimetry records must be kept by the treatment facility for at least one full year after treatment. Records must be made available to AQIS on request.

Records kept by treatment centres should also address the following:

- Identification of facility and responsible parties
- Purpose of treatment
- Target regulated pest(s)
- Lot size, volume and identification, including number of articles or packages
- Identifying markings or characteristics
- Quantity in lot
- Absorbed doses (target and measured)
- Date of treatment
- Observed deviations from treatment specification.

6.7 Tablegrape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti*

6.7.1 General requirements

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern.

MAF have directed AQIS to either undertake stringent field control programs to eliminate this pest or an agreed treatment effective against redback spiders. The Australian tablegrape industry has opted for mandatory fumigation using a sulphur dioxide - carbon dioxide treatment.

In addition to treatment centre registration, fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Treatment centres carrying out fumigations on tablegrapes must meet the general requirements outlined above for treatment centres and the listed criteria detailed in Section 6.5.1 of the SOM.

6.7.2 Treatment

The mandatory fumigation treatment for redback spiders is a **mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes**.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

AQIS inspection staff must sight fumigation treatment records to enable phytosanitary certification of tablegrapes.

6.7.3 Traceability

If a live redback spider is detected during inspection, systems must be in place to allow trace back to individual fumigation treatments.

6.7.4 Additional precautionary measures

Unused packaging carried over to the following season presents an additional pathway for the introduction of Redback spiders into New Zealand.

When carrying unused table grape packaging over, either pest-proofing or disinfestation of the packaging is necessary.

SECTION 7 EXPORTER RESPONSIBILITIES

7.1 General requirements

All exporters of NZ BQA products must be registered with AQIS. Exporter applications (Attachment 2.5) will be made to the appropriate regional AQIS Office.

Applications for registration will include details of the commodities and treatment pathways the exporter intends to use to meet with conditions stipulated in the SOM.

AQIS will accept the application if details of treatment centres are not known at the time, but exports of the particular commodities will not be permitted until relevant information is provided to AQIS.

Exporters are responsible for ensuring that all parties engaged as part of their export pathway, are registered by AQIS (where applicable) for specific purposes in accordance with the SOM.

Regional AQIS offices will endorse BQA registration forms once a registration status has been granted. The endorsed forms will be held by the issuing AQIS office, with a copy provided to the applicant.

Exporters engaging a BQA registered party, must have a copy of the endorsed AQIS registration form on file for auditing purposes. Failure by an exporter to engage an AQIS registered party for specific purposes in accordance with the SOM, may result in a suspension of their export registration status.

Exporters must ensure at all times either directly or by delegation:

. Product security during loading, transport and export consignment consolidation is not compromised and there can be no substitution or cross infestation of product following treatment.

. Exporter inspection requirements as detailed in the SOM are performed by qualified staff and records are kept for all inspections performed.

. Inspection records are given for each grower line presented for AQIS inspection.

. Liaison with AQIS/State Officers takes place as necessary to advise of product movement and inspection requirements,

. Documentation, including phytosanitary certificate endorsements are maintained.

7.2 Exporter Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand, with full details of the inspection to be recorded (Attachment 2.6). A copy of grower line inspection records must be presented to staff at the time of AQIS inspection.

Exporter inspections must be undertaken at an appropriate sampling rate, as given in *Table 1* of the SOM. Exporters need to ensure all staff they delegate inspection duties to, have been audited and approved by AQIS.

If the exporter (or exporter delegate) opts for AQIS to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of AQIS inspection.

During exporter inspections, any soft, bruised or rotted products will be cut to determine evidence of fruit fly infestation. Results of products cut will be noted on the inspection record. A copy of this record must be presented with the consignment for AQIS inspection. Inspection records together with other documentation relating to the consignment must be held on file for 2 years and is subject to AQIS/MAF audit.

All inspections, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10.

NOTE: Accredited AA establishments are not required to undertake end-point inspections if procedures enable a 600 unit in-line inspection and the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

7.2.1 Split Consignment Inspections

Following exporter/ED grower line inspections, exporters can elect an AQIS ‘consignment’ inspection even if the 'consignment' is to be split to varying destinations and differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any produce not forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: "Split consignment" procedures cannot be implemented until AQIS has approved the necessary documentation and record keeping systems.

Exporters/importers wanting to reduce MAF on arrival inspections of split consignments must adopt a system which fully documents the management procedures. Any procedure must include:

. Notification of consignment details to MAF as they occur.

. New Zealand communication links (importer and MAF contacts).

. Flow chart detailing how the phytosanitary certificate moves through the system.

7.3 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers, will be included on all packages covered by the NZ BQA.

A declaration to this effect will be made on the Notice of Intention to Export "Export Permit" (EX 28), EX186 (if appropriate), or in the Exporter Declaration/Comments box in an RFP as follows:

> “The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by NZ MAF and specified tolerances have not been exceeded”

It is important that all phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX 28, the exporter must maintain a documented link to the Notice of Intention to Export (EX28). This system must be approved by the Regional Export Manager.

Trace back for consignments drawn from several RFP's is obtained through the EXDOC system.

7.4 Rejected Produce

If any stages of live fruit fly are found during an exporter/ED inspection, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other NZ BQA produce, and identified as not suitable for export to New Zealand.

The exporter or ED must immediately notify AQIS of the detection.

AQIS will formally advise and suspend the relevant treatment centre pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

Should during the exporter/ED inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise AQIS. The product must be identified as failed for export to New Zealand and segregated from all other NZ BQA products. Reconditioning of consignment may occur where applicable.

AQIS will formally advise and suspend the relevant grower pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the occurrence, reinstatement for the NZ BQA may be permitted.

The mutual fumigation recognition arrangement can be used when regulated pests are detected. This arrangement cannot be used as a pre-emptive measure. Please refer to PHYTO for more information (http://www.aqis.gov.au/phyto).

7.5 Security of Produce

Export shipping or airfreight containers will be inspected by a freight forwarding agent where delegated or exporter for cleanliness and condition (any openings in containers will be taped over).

Container inspections can be delegated to a container park. Persons carrying out inspections must be audited to ensure they are aware of their responsibilities. If inspections are carried out at a container park, copies of completed inspection records must be faxed (or sent with container documents) to point of loading and retained on file by both the container park and exporter/freight forwarder etc.

NOTE: It is only necessary to complete the "Container report sheet" for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

7.6 Audit

Exporters will undergo one audit per year. All relevant documentation for NZ BQA consignments must be made available to AQIS upon request.

Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter inspections and documentation (i.e. RFP's, EX 186, EX28's and phytosanitary certificates).

Persons approved to act as an ED will undergo two audits per year. Audits will include documentation, knowledge of regulated pests, inspection techniques, sample selection and knowledge of relevant parts of the SOM.

NOTE: Where an exporter elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the AQIS regional office within a minimum of 10 working days prior to the date of effect.

7.6.1 Non-compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

An exporter found to be not managing responsibilities in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

SECTION 8 GOVERNMENT RESPONSIBILITIES

This section details the responsibilities associated for participants under the SOM to ensure requirements of the SOM are adhered to.

All systems will be subject to random audits by the AQIS Canberra office and MAF will audit systems at frequent intervals. The audits will include measurement of pathway compliance from growers (where required) through to final export container loading and associated documentation.

8.1 AQIS Canberra office

The AQIS organisation structure and management flow chart is provided at the end of this section. It is recommended that each AQIS Regional office develop its own organisation structure and management flow chart as it will apply to the management of the NZ BQA, and include this information for distribution within that state.

8.1.1 Manager - Plant Programs

Will be responsible for ensuring;

- All components of the SOM are being complied with consistently, over all commodities and treatments through all states.
- Regular audits of State Departments (where applicable) and AQIS systems are conducted by AQIS Canberra Office to ensure compliance with the conditions and requirements of the NZ BQA and that a proper record management system is available and easily accessible.
- AQIS Regional offices are conducting audits of AA as detailed in the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP and the requirements of the NZ BQA and this manual.
- Where non-conformances are found, that suitable corrective action is undertaken and verified by AQIS.
- Collate and circulate up to date national lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.
- That all amendments to this manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.
- That audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in AQIS area freedom certification.

8.2 AQIS State Offices

AQIS state offices, through the Regional Managers and Export Managers located in Queensland, New South Wales, Victoria, Northern Territory, Western Australia, Tasmania and South Australia are responsible for the following:

- The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM.
- Ensure all exporters, treatment centres, packhouse and growers (where applicable), are meeting the requirements of the NZ BQA and the directions contained in the SOM.

- Ensure inspection staff are trained in the terms, responsibilities and conditions for all NZ BQA commodities being exported from that state.
- Ensure all required components of the export pathways for commodities are registered for that state.
- Ensure audits (including internal audits), are being conducted at the correct frequency and the measurement of the system and corrective action where required, has been effected and recorded.
- Ensuring Canberra Office (Program Manager) is informed where any breaches of the conditions of this manual are observed.
- Ensuring all inspectors in their state, involved in the NZ BQA export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported in any district of Australia.
- Develop a system of recording registrations, and that such records are maintained so they are auditable.
- Ensuring the Canberra office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

8.2.1 Registration requirements

AQIS offices will implement a registration system where applicable for all growers, packhouses, treatment centres and exporters.

8.2.2 Sampling requirements

For the purpose of the treatments detailed in this manual the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

8.2.3 AQIS inspection procedures

Exporters will provide AQIS with exporter/ED inspection records prior to inspection. If all export documentation is not provided or incomplete, the consignment will not be inspected.

If the exporter (or exporter delegate) opts for AQIS to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of AQIS inspection.

Inspections performed by AQIS will be recorded on "Inspection Record - New Zealand" (Attachment 2.6)

NOTE: Alternative types of inspection records can be used as long as they contain the information supplied on the inspection record

AQIS inspectors must conduct inspections at the same sampling rate (Table 1) undertaken by the exporter/ED.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

Packaging must be checked during the inspection for compliance with the *Export Control (Plants and Plant Products) Orders, 2005* and requirements of the SOM.

NOTE: AQIS will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

8.2.4 Consignment line samples

Following exporter/ED inspections, exporters are permitted to present consignment lines to AQIS for inspection and phytosanitary certification. Consignment lines consist of commodities from a common treatment pathway (can be different growers).

Where there is more than one grower or commodity presented for AQIS inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. The following points may be taken into account in determining selection of sample cartons:

- From the grower submitting the largest grower line within the consignment.
- From the commodity comprising the greatest quantity in the consignment line.
- At least one carton from the commodity seen to present the greatest quarantine risk.
- At least one carton from any known "poorer" performing growers/packers or from a newly registered grower or packer.

Consignment lines passed after AQIS inspection will be identified as "Passed for New Zealand" and immediately segregated. It is recommended exporters implement a system (i.e. stickers on pallets) to make identification of passed consignments easier.

8.2.5 Rejection procedures

A rejection upon inspection by AQIS of either a consignment or grower line does not necessarily indicate a packhouse or grower has breached the conditions of the NZ BQA. However the rejection does indicate a possible problem within the packer/exporter system and will be recorded.

All rejections are to be recorded on AQIS Form Ex 161 (Inspection Advice) and must detail the grower, packer and export pathway through which the commodity has passed.

Exporters/EDs who fail two inspections in any one season must be audited immediately. This will ascertain any reasons AQIS may consider necessary for suspension or corrective actions to be undertaken.

The following conditions will apply for AQIS inspection rejected products:

- Any rejection for RG3 pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of "Area Freedom," all districts in that state are suspended. Audit/s must be undertaken at the earliest opportunity.
- Any rejection for RG2 pests – AQIS Canberra office to be informed immediately to consider if audit of grower, packer, exporter or ED is necessary. This may depend on type and quantity of infestation detected. If applicable, the exporter can choose to undertake corrective action (i.e. treatment, withdrawal of the offending grower). Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for AQIS inspection.
- Any rejection for RG1/regulated pests - The consignment can be totally withdrawn or corrective action undertaken. Corrective action can include treatment, withdrawal of the offending grower.

Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for AQIS inspection.

8.3 Audit

AQIS inspection staff will conduct audits of applicable growers, packhouse, treatment centres, exporters and exporter's delegates to ensure compliance with relevant section of this manual.

8.3.1 Audits after Product Rejections by AQIS

Should an audit be considered necessary after rejection by an AQIS officer, the following details will be investigated:

- Exporter/delegate inspection records.
- Grower pest monitoring records and pest control diaries (commodity specific).
- Packer training and associated pest identification.
- General hygiene of premises.
- Segregation and identification of produce.
- Staff responsibilities,
- Exporter or exporter's delegate inspection procedures and pest/weed identification skills.

Should auditing fail to identify any breach of the NZ BQA and responsibility of the SOM, all parties will be reinstated.

Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the Export Manager who will co-ordinate necessary action and advise all parties at the earliest opportunity.

Copies of any audit will be given to the relevant components of the pathway audited and kept on file.

Inspectors undertaking these audits must be appropriately trained and accredited.

Table 9 - AQIS AUDIT FREQUENCY

	Initial Year of registration	**Continuous Registration**	**Winter Window**
Grower	Initial audit prior to export + One additional audit during export period within calendar year *** Tomatoes** – Initial audit prior to export + monthly audits of property & spray diaries	One audit early in new export period (no initial audit required) *** Tomatoes** – Initial audit prior to export, extending to 2 monthly if substantial compliance is shown	Monthly audits of property & spray diaries * Audits extended to 2 monthly if substantial compliance is shown
Packer	Initial audit prior to export + One additional audit during calendar year	Minimum one audit annually	
Treatment Centre	Monthly audits required in first year **Dimethoate** - One initial audit during the first 10 days of season + monthly audits for remainder of calendar year whilst conducting treatments	**Fumigation** - One annual audit in first 10 days of export period (to be conducted during a treatment) + 2-3 times during remainder of treatment period within calendar year **Cold Storage** – One annual during first 3 treatments **Dimethoate –** Two audits per calendar year if substantial compliance is shown	
Exporter Delegate	Initial audit prior to export + One additional audit during remainder of calendar year	Minimum two audits per year If fail at two AQIS end point inspections, immediate audit required	
Exporter	One audit Annually	One audit Annually	
Crop monitor	One Audit Annually	One audit Annually	

8.4 Fruit Fly Area Freedom – State Departments

State Departments are responsible for the following:

- Where required, ensure the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual state management plans (as submitted to MAF), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of MAF Biosecurity Authority Standards 158.03.06 and 158.03.07 and
- Report any detections of economically significant fruit fly species found within trapping grids to AQIS Canberra Office within 24 hours of identification.

8.4.1 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. The procedures and controls are documented such that they can be readily demonstrated to, and audited by AQIS Canberra Office and MAF to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of fruit flies and managed under the tri-state agreement between the states of New South Wales, Victoria and South Australia and:

. Reflect the requirements of New Zealand MAF Biosecurity Authority Standard 158.03.06., the
Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

. Management and control procedures for each area which have been accepted by MAF as meeting all the requirements (or equivalence) with the MAF Biosecurity Authority Standard 158.03.06.

. State Departments must advise AQIS Canberra Office of any amendments to their management procedures at the earliest opportunity. Canberra Office will forward amendments to MAF. Canberra will audit the management practices for fruit fly trapping on a regular basis (minimum annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable MAF Biosecurity Authority Standard 158.03.06.

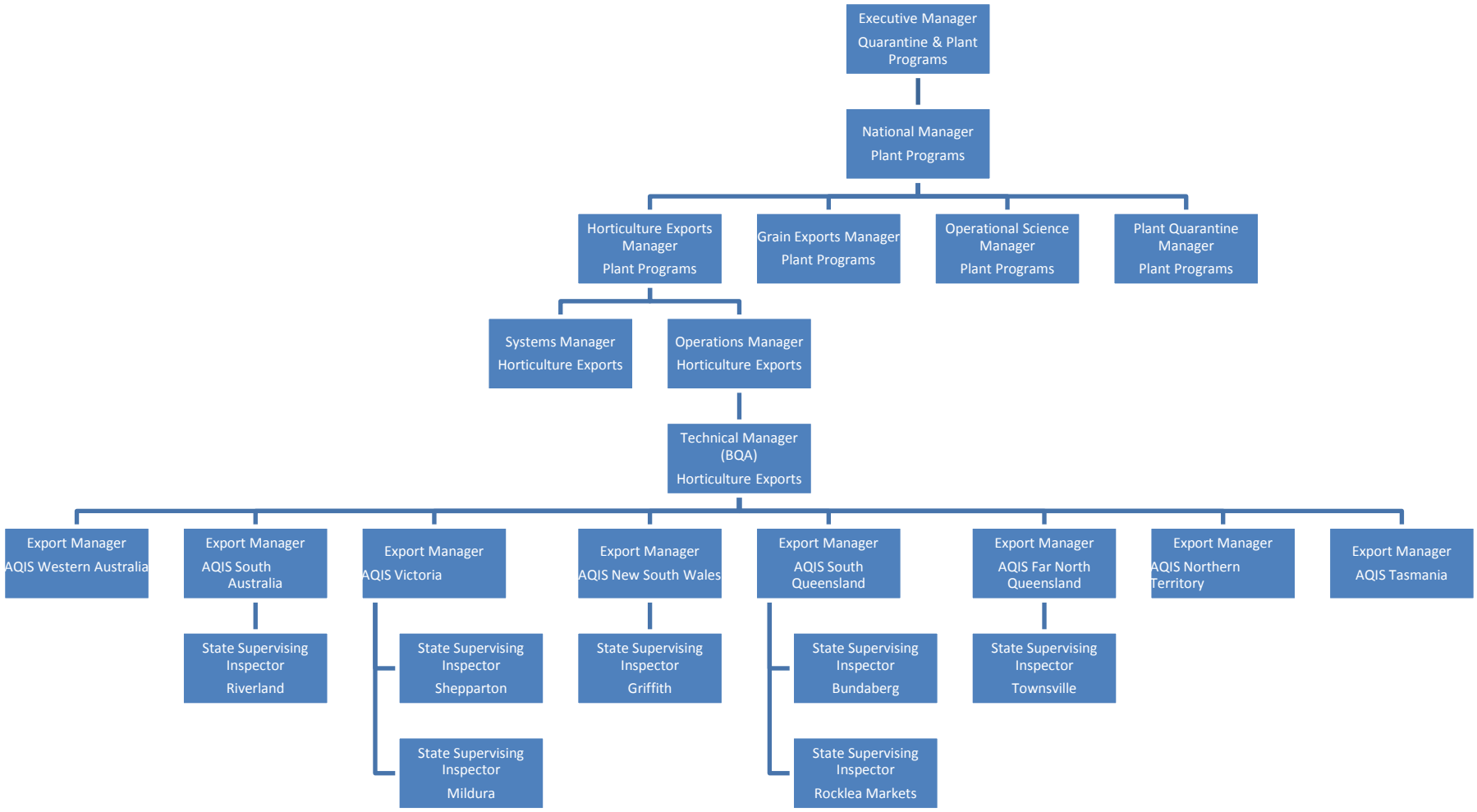
8.4.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

Attachment to Section 8.1 AQIS Plant Contact List



ATTACHMENT 1 - NEW ZEALAND PEST LIST

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under Appendices 2 (Area Freedom) and 5 (cold storage disinfestation) to the NZ BQA.

Growers and packhouse must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

- avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600-unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale

Diaspididae

Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Mite	
Arachnida	
Acarina	

Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	-

Non-regulated non plant pests/organisms

None

BANANA
Musa

Bananas can be exported to New Zealand under Appendix No. 6 – Non Host of the NZ BQA.

Growers and packhouses need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a regulated pest until official categorisation has been determined by AQIS/MAF.

***Maconellicoccus hirsutus* (pink hibiscus mealybug) is listed for bananas, and AQIS can certify freedom from this pest based on the following:**

Maconellicoccus hirsutus

1. In field controls for *Maconellicoccus hirsutus* species are a requirement of grower registration, as such pink hibiscus mealybug will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Maconellicoccus hirsutus* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

3. Pre-export inspection of fruit will identify the presence of *M. hirsutus*, and the fruit would be rejected for export to New Zealand.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Cercospora hayi	diamond spot
Chaetothyrina musarum	sooty blotch
Cladosporium spp.	cladosporium mould
Glomerella cingulata var. *minor (*anamorph *Collectotrichum gloeosporioides* var. *minor)*	anthracnose
*Guignardia musae (*anamorph *Phyllosticta musarum)*	freckle
Phytophthora palmivora	black rot
Ramichloridium musae	freckle
Aleurodicus dispersus	spiralling whitefly
Amblypelta lutescens	fruit spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Araecerus coffeae	coffee bean weevil
Aspidiotus destructor	coconut scale
Atherigona orientalis	muscid fly
Bactrocera bryoniae	**fruit fly** #
Bactrocera musae	**banana fruit fly** #
Bactrocera cucumis	**cucumber fruit fly** #

Bactrocera frauenfeldi	**fruit fly #**
Bactrocera jarvisi	**jarvis' fruit fly #**
Bactrocera neohumeralis	**lesser Queensland fruit fly #**
Bactrocera tryoni	**Queensland fruit fly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Chaetanaphothrips signipennis	banana rust thrips
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Cnaphalocrocis medinalis	rice leaf folder
Dirioxa pornia	Island fruit fly
Dysmicoccus brevipes	pineapple mealybug
Elixothrips brevisetis	banana rind thrips
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Ferrisia virgata	striped mealybug
Geloptera miracula	chyrsomelid beetle
Haplothrips gowdeyi	black flower thrips
Helicoverpa assulta	cape gooseberry budworm
Hemiberlesia palmae	citrus black scale
Icerya aegyptiaca	Eygyptian fluted scale
Icerya seychellarum	Seychelles scale
Isotenes miserana	orange fruit borer
Leptoglossus gonagra	squash bug
Maconellicoccus hirsutus	**pink hibiscus mealybug #**
Melanitis leda ismene	Rice butterfly
Monolepta australis	red-shouldered leaf beetle
Opogona glycyphaga	sugar-cane bud moth
Orgyia australis	vapourer moth
Pentalonia nigronervosa	banana aphid
Pinnaspis strachani	hibiscus snow scale
Planococcus citri	citrus mealy bug
Planococcus minor	passionvine mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rhyparida discopunctulata	leaf beetle
Spodoptera exigua	beet armyworm
Thrips florum	flower thrips
Thrips hawaiiensis	banana flower thrips
Tiracola plagiata	banana fruit caterpillar
Tirathaba rufivena	fruit borer
Unaspis citri	citrus snow scale
Xenothictis sciaphila	tortricid
Brevipalpus lewisi	bunch mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	vegetable spider mite

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Erwinia carotovora	bacterial soft rot
Aspergillus flavus	aspergillus storage rot
Aspergillus niger	aspergillus rot
*Ceratocystis paradoxa (*anamorph *Thielaviopsis paradoxa)*	ceratocystis rot
Colletotrichum musae	anthracnose
Deightoniella torulosa	black tip
Fusarium pallidoroseum	fusarium rot
*Glomerella cingulata (*anamorph *Colletotrichum gloeosporioides)*	anthracnose
Lasiodiplodia theobromae	fruit and stem-end rot
*Magnaporthe grisea (*anamorph *Pyricularia grisea)*	Johnson's spot
Sclerotinia sclerotiorum	cottony rot
Agrotis ipsilon	greasy cutworm
Aonidiella aurantii	California red scale
Aphis gossypii	cotton aphid
Araecerus fasciculatus	coffee bean weevil
Aspidiotus nerii	oleander scale
Chrysodeixis eriosoma	green garden looper
Coccus hesperidum	brown soft scale
Hemiberlesia cyanophylli	cyanophyllum scale
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Hercinothrips bicinctus	banana silvering thrips
Hermetia illucens	black soldier fly
Listroderes difficilis	vegetable weevil
Pseudococcus longispinus	longtail mealybug
Rhopalosiphum maidis	corn leaf aphid
Spodoptera litura	cluster caterpillar
Brevipalpus californicus	bunch mite
Polyphagotarsonemus latus	broad mite
Tetranychus lambi	strawberry spider mite
Tetranychus urticae	twospotted spider mite

# Denotes high impact pest

CAPSICUM
Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendices 4 (dimethoate treatment) and 10 (field control programmes) to the NZ BQA/IHS.**

A number of Risk Group 2 pests are listed for capsicums, and AQIS can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. bryoniae* should it occur.
4. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Mandatory pre-export application of dimethoate spray to capsicum (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on capsicum fruit during AQIS pre-export inspection.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. If by chance *B. tabaci* were present on harvested capsicum fruit as a hitch-hiker, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
5. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
6. Historical records show that *B. tabaci* has never been detected on capsicum fruit during AQIS pre-export inspection.

Conogethes punctiferalis

1. In field controls for *Lepidopteran* species are a requirement of grower registration, as such YPM (Yellow Peach Moth) will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Lepidopteran spp* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

Thrips palmi

1. If *T. palmi* were present on harvested capsicum fruit, the pre-export dimethoate spray treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on capsicum fruit during AQIS pre-export inspection.

Monilinia fructigena

1. This fungus does not occur in Australia.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
*Bactrocera kraussi**	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly

Homoptera
Aleyrodidae
Bemisia tabaci [vect]
Lepidoptera
Pyralidae
Conogethes punctiferalis — yellow peach moth
Thysanoptera
Thripidae
Thrips palmi [vect.] — palm thrips

Fungus

Ascomycota
Leotiales
Sclerotiniaceae
Monilinia fructigena — European brown rot
(anamorph *Monilia fructigena*)

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta
Coleoptera
Coccinellidae
Epilachna vigintioctopunctata — 28-spot ladybird
Curculionidae
Listroderes difficilis — vegetable weevil
Tenebrionidae
Gonocephalum carpentariae — false wireworm
Diptera
Muscidae
Atherigona orientalis — muscid fly
Tephritidae
Dirioxa pornia — island fruit fly
Hemiptera
Lygaeidae
Nysius vinitor — Rutherglen bug
Pentatomidae
Plautia affinis — green stink bug
Pyrrhocoridae
Dindymus versicolor — harlequin bug
Rhopalidae

Leptocoris mitellatus — leptocoris bug
Homoptera
Aleyrodidae
Aleurodicus dispersus — spiralling whitefly
Trialeurodes vaporariorum [strain] — greenhouse whitefly
Cicadellidae
Austroasca viridigrisea — vegetable leafhopper

Coccidae	
Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale
Diaspididae	
Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
Nectria haematococca var. *brevicona*	dry rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata f. sp. *lycopersici*	-
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *vasinfectum*	fusarium wilt
Pythiales	

Pythiaceae

Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak

Virus

-

-

-

tobacco leaf curl bigeminivirus [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Weed

Angiospermae

Asterales

Asteraceae

Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf
Xanthium spp. (except *X. spinosum*)	bur

Caryophyllales

Amaranthaceae

Amaranthus spp.	amaranthus

Geraniales

Zygophyllaceae

Tribulus spp.	caltrop

Poales

Poaceae

Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass

Solanales

Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Curculionidae	
Listroderes costirostris	vegetable weevil
Listroderes obliquus	vegetable weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Myzus persicae	green peach aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Pyralidae	
Sceliodes cordalis	poroporo fruit borer
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculops lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli*)	phomopsis stem rot
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phoma destructiva	bulb rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose

Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Bacterium	
-	
-	
Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	
A*grobacterium tumefaciens*	crown gall
Weed	
Angiospermae	
Asterales	
Asteraceae	
Galinsoga parviflora	
Sonchus spp.	sowthistle
Poales	
Poaceae	
Echinochloa spp.	grasses
Eleusine indica	goose grass

Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis, C. reticulata, C. maxima, C. paradisi, C. limon and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug

Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth

Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	

Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non-plant pests/organisms

None

CUCUMBER
Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme),**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for cucumbers. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested cucumber fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested cucumber fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspections of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on cucumber fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the NZ BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Cucumbers exported to New Zealand under appendix 4 and 10 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.

3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	

Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	
Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	

Thripidae

Frankliniella occidentalis [vect.]	western flower thrips
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida

Acarina

Acaridae

Tyrophagus dimidiatus	mushroom mite

Tetranychidae

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota

Unknown Ascomycota

Hyponectriaceae

Monographella cucumerina (anamorph *Microdochium tabacinum*)	--

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales

Dematiaceae

Cladosporium cucumerinum	--

Moniliaceae

Verticillium albo-atrum [severe strain]	progressive wilt

Tuberculariales

Tuberculariaceae

Fusarium oxysporum f. sp. *melonis*	--

Oomycota

Pythiales

Pythiaceae

Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot

Zygomycota: Zygomycetes

Mucorales

Choanephoraceae

Choanephora cucurbitarum	blight

Virus

-

-

-

tobacco ringspot nepovirus [strain] [VO]	-
tomato spotted wilt tospovirus [strain] [VO]	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid

Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi	fusarium rot

(anamorph *Fusarium fujikuroi*)	
Gibberella gordonia	mould
(anamorph *Fusarium heterosporum*)	
Gibberella intricans	root and stem dry rot
(anamorph *Fusarium equiseti*)	
Gibberella zeae	mould
(anamorph *Fusarium graminearum*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	grey mould
(anamorph *Botrytis cinerea*)	
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria	--
(anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	sour rot
(anamorph *Geotrichum candidum*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	rhizoctonia rot
(anamorph *Rhizoctonia solani*)	
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	

Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of Sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Growers and packhouse must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk Group 2 pests *Conogethes punctiferalis*. AQIS will be certifying Southern State grapes area free for the Risk Group 2 pest *Maconellicoccus hirsutus*.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name
Insect	

Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug

Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail
Fungus	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	-
Coniella diplodiella	white rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria vitis	leaf disease

Cladosporium viticola	cladosporium leaf spot

Weed
Angiospermae
Asterales
Asteraceae

Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except *X. spinosum*) [contaminant]	bur

Geraniales
Zygophyllaceae

Tribulus terrestris [contaminant]	caltrop

Poales
Poaceae

Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass

Solanales
Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae

Latrodectus hasselti	Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite
Arachnida
Acarina
Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tenuipalpidae

Brevipalpus californicus	bunch mite

Tetranychidae

Panonychus ulmi	European red mite
Tetranychus urticae	twospotted spider mite

Mollusc
Gastropoda
Stylommatophora
Helicidae

Helix aspersa	common garden snail

Fungus
Ascomycota
Diatrypales
Diatrypaceae

Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback

Dothideales
Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker

Elsinoaceae

Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose

Mycosphaerellaceae

Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot

Erysiphales
Erysiphaceae

Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew

Leotiales
Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot

Phyllachorales
Phyllachoraceae

Glomerella cingulata (anamorph	bitter rot

Colletotrichum gloeosporioides)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	-
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	-
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	-
Digitaria violascens [contaminant]	-
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass
Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	-
Pennisetum macrourum [contaminant]	African feather grass
Solanales	
Solanaceae	
Lycium barbarum [contaminant]	boxthorn

Lycium ferocissimum [contaminant] boxthorn

Non-regulated non plant pests

None

Litchi chinensis

Lychees can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Additional Declaration

Option1 *EXDOC Endorsement No 2298*

1) The Lychees in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS.

Regulated Pest List Commodity Sub-class: Fresh Fruit/Vegetables *Litchi chinensis* from Australia

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Amblypelta lutescens	Banana spotting scale
Amblypelta nitida	Fruit spotting scale
Bactrocera jarvisi	Jarvis fruit fly
Bactrocera neohumeralis	Lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceroplastes rubens	Pink/red wax scale
Cryptophlebia ombrodelta	Seychelles scale
Ischnaspis longirostris	Black thread scale
Nysius vinitor	Rutherglen bug
Bipolaris hawaiiensis	Fungi
Pestalotiopsis sp.	Fungi

MANGO
Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Bactrocera cucumis	cucumber Fruit Fly
Bactrocera frauenfeldi	fruit Fly
Bactrocera jarvisi	jarvis' fruit fly
Bactrocera musae	banana fruit Fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera opiliae	false Oriental Fruit Fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly
Dirioxa pornia	Island Fruit Fly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	yellow peach moth
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Frankliniella schultzei	flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Helopeltis clavifer	
Icerya aegyptiaca	Egyptian fluted scale
Idioscopus clypealis	mango hopper
Idioscopus nitidulus	mango hopper
Ischnaspis longirostris	black thread scale
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Monolepta australis	red-shouldered leaf beetle

Monolepta divisa	small monolepta beetle
Nipaecoccus vastator	karoo thorn mealybug
Ophiusa tirhaca	
Penicillaria jocosatrix	mango tipborer
Phenacaspis dilatata	mango scale
Planococcus citri	Citrus mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rastrococcus sp.	
Rhyparida limbatipennis	
Saissetia miranda	Mexican black scale
Selenothrips rubrocinctus	redbanded thrips
Sternochetus mangiferae	mango seed weevil
Asterina punctiformis	
Chaetothyrina tenuissima	stem sooty blotch
Cytosphaera mangiferae	stem-end rot
Elsinoe mangiferae	mango scab
(anamorph Sphaceloma mangiferae)	
Fusicoccum mangiferae	
Nattrassia mangiferae	stem-end rot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangifolia	storage rot
Pestalotiopsis theae	mango blight
Pestalotiopsis virgatula	mango leaf spot
Phomopsis mangiferae	stem end rot
Pythium mangifera	mango powdery mildew
(anamorph Oidium mangiferae)	
Schizoparme straminea	schizoparme fruit rot
(anamorph Coniella	

Non-regulated pests

Pest Scientific Name	**Common Name**
Aonidiella aurantii	California red scale
Ceroplastes destructor	white wax scale
Epiphyas postvittana	light brown apple moth
Helicoverpa armigera	tomato fruitworm
Heliothrips haemorrhoidalis	greenhouse thrips
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Icerya purchasi	cottony cushion scale
Parasaissetia nigra	nigra scale
Pseudococcus longispinus	long tailed mealybug
Saissetia coffeae	helmet scale
Toxoptera aurantii	black citrus aphid
Toxoptera citricida	brown citrus aphid
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite

Alternaria alternata	black stalk rot
Botryosphaeria dothidea (*anamorph Fusicoccum aesculi)*	canker
Botryosphaeria parva (*anamorph Fusicoccum parvum)*	canker
Botryosphaeria rhodina	gummosis
Botryosphaeria ribis (*anamorph Lasiodiplodia theobromae)*	canker
Botryotinia fuckeliana (*anamorph Botrytis cinerea)*	grey mould
Cladosporium cladosporioides	cladosporium leaf spot
Cochliobolus hawaiiensis	leaf spot, seed rot
Colletotrichum acutatum	anthracnose
Colletotrichum coccodes	anthracnose
Dipodascus Geotrichum (*anamorph Geotrichum candidum)*	sour rot
Dothiorella aromatica	stem-end rot
Epicoccum purpurascens	black mould
Erysiphe cichoracearum (*anamorph Oidium asterispunicei)*	powdery mildew
Fusicoccum luteum	bunch rot
Glomerella cingulata (*anamorph Colletotrichum gloeosporioides)*	anthracnose
Glomerella lagenaria (*anamorph Colletotrichum orbiculare)*	
Pestalotiopsis funereal	leaf spot
Pestalotiopsis versicolor	pestalotiopsis rot
Phytophthora nicotianae	buckeye rot
Pithomyces chartarum	facial eczema fungus
Pleospora allii (*anamorph Stemphylium vesicarium)*	black mould
Rhizopus stolonifer	rhizopus soft rot
Thanatephorus cucumeris (*anamorph Rhizoctonia solani)*	rhizoctonia rot

MELON
Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 2 and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Pest Scientific Name	**Common Name**
Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments	
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly
Quarantine: Risk group 2 pests (actionable) - Management Control Systems	
Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite
Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.	
Insect	

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Henosepilachna suffusa	-
Curculionidae	
Listroderes difficilis	vegetable weevil
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm

Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips

Mite

Arachnida
Acarina
Tetranychidae

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota
Unknown Ascomycota
Hyponectriaceae

Monographella cucumerina (anamorph *Microdochium tabacinum*)	--

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae

Phomopsis cucurbitae	--

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae

Cercospora citrullina	cigar-end
Ulocladium sp.	-

Tuberculariales
Tuberculariaceae

Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--

Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak

Zygomycota: Zygomycetes

Mucorales
Choanephoraceae
Choanephora cucurbitarum blight

Bacterium

-
-
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* bacterial rot

Virus

-
-
-
tobacco ringspot nepovirus [strain] [VO] -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	

Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot

Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata (anamorph *Fusarium lateritium*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot

Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Pseudomonadaceae	
Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

PAPAYA
Papaya

Papaya can be exported to New Zealand under Appendix No. 12 - Irradiation of the NZ BQA.

Growers and packhouse choosing 250 Gray (Gy) irradiation for papaya do not need to be specifically registered for the New Zealand export program.

Growers and packhouse choosing 150 Gy irradiation and in-field controls for papaya need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

***Conogethes punctiferalis* (yellow peach moth) is listed for papaya, and AQIS can certify freedom from this pest based on the following:**

Conogethes punctiferalis

1. If infield controls for *Conogethes punctiferalis* are carried out, fruit will be irradiated at 150Gy prior to export.

2. Where irradiation is chosen as the pest control activity for *Conogethes punctiferalis* a minimum dose of 250Gy must be applied prior to export. This treatment will be considered to be a generic treatment for all regulated arthropod pests listed below.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	**Common Name**
Asperisporium caricae	black spot
Phomopsis caricae-papayae	wet fruit rot
Phytopthora capsici	buckeye rot
Phytopthora palmivora	black rot
Bactrocera cucumis	**cucumber fruit fly** #
Bactrocera frauenfeldi	**fruit Fly** #
Bactrocera jarvisi	**jarvis' fruit fly** #
Bactrocera musae	**banana fruit fly** #
Bactrocera neohumeralis	**lesser Queensland fruit fly** #
Bactrocera tryoni	**Queensland fruit fly** #
Ceratitis capitata	**Mediterranean fruit fly** #
Dirioxa pornia	Island Fruit Fly
Aleurodicus dispersus	spiraling whitefly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Carpophillis maculatus	dried fruit beetle

Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	**yellow peach moth** #
Eucalymnatus tessellatus	tessellated scale
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Ferrisia virgata	striped mealybug
Pericyma cruegeri	poinciana looper
Pseudaulacaspis cockerelli	Cockerell's scale
Papaya ringspot virus (type P strain)	PRSV-Type P

Non-regulated pests

Pest Scientific Name	**Common Name**
Brevipalpus phoenicis	passion vine mite
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria rhodina (anamorph Lasiodiplodia theobromae)	gummosis
Botryosphaeria ribis	canker
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum dematium	anthracnose
Corynespora cassicola	leaf spot
Erysiphe cruciferarum	powdery mildew
Fusarium pallidoroseum	fruit core rot
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	anthracnose
Leveillula taurica	powdery mildew
Mycosphaerella caricae (anamorph Phoma caricae-papayae)	leaf spot
Phytophthora nicotianae	buckeye rot
Rhizopus stolonifer	rhizopus soft rot
Aphis spiraecola	spirae aphid

Denotes high impact pest

PINEAPPLE
Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale

Pseudococcidae
Dysmicoccus brevipes pineapple mealybug
Isoptera
Rhinotermitidae
Rhinotermes intermedius termite
Lepidoptera
Tineidae
Opogona glycyphaga sugarcane bud moth

Mite

Arachnida
Acarina
Acaridae
Tyrophagus sp. mould mite
Histiomidae
Histiostoma sp. mite
Tarsonemidae
Tarsonemus ananas pineapple mite
Tenuipalpidae
Dolichotetranychus floridanus pineapple false spider mite

Nematode

Secernentea
Tylenchida
Hoplolaimidae
Rotylenchus reniformis
Pratylenchidae
Pratylenchus brachyurus root lesion nematode

Symphylid

Symphyla
Unknown Symphyla
Symphylidae
Hanseniella sp. symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetes
Dematiaceae
Thielaviopsis paradoxa
Moniliaceae
Penicillium funiculosum

Bacterium
-
-
Enterobacteriaceae
Erwinia ananas marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae
Iridomyrmex glaber black house ant
Paratrechina vaga ant
Tapinoma sp. ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin's flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps

Mite

Arachnida
Acarina
Acaridae

Rhizoglyphus sp.	acarid mite

Nematode
Secernentea
Tylenchida
Meloidogynidae

Meloidogyne javanica	Javanese root knot nematode

Fungus
Ascomycota
Hypocreales
Hypocreaceae

Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot

Oomycota
Pythiales
Pythiaceae

Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus
-
-
-

tomato spotted wilt tospovirus	-

Non-regulated non plant pests/organisms

Pest Scientific Name	Common Name

Insecta
Hymenoptera
Formicidae

Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Anastrepha fraterculus	South American fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Listroderes difficilis	vegetable weevil
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil

Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil

Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Myriapod

Diplopode	
Julida	
Blaniulidae	
Blaniulua guttulatus	spotted snake millipede

Mollusc

Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Limacidae	
Deroceras panormitanum	brown field slug
Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO

Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and 10 (field control programs)**

Growers and packhouse that are growing/packing tomatoes for export to New Zealand under appendix 4 to the NZ BQA must be registered for this purpose.

A number of Risk Group 2 pests have been listed for tomatoes. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested tomato fruit as a hitch-hiker, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on tomato fruit during AQIS pre-export inspection.

Thrips palmi

1. If *T. palmi* were present on harvested tomato fruit, the pre-export dimethoate spray/dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on tomato fruit during AQIS pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export application of dimethoate spray to tomatoes (appendix 4 to the NZ BQA) would also control *B. musae* should it occur.
4. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. musae* has never been detected on tomato fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes difficilis	vegetable weevil
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Lonchaeidae	
Lamprolonchaea brouniana	metallic-green tomato fly
Muscidae	

Antherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Aphis gossypii [vect.]	cotton aphid
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm
Thysanoptera	
Thripidae	
Frankliniella occidentalis [vect.]	western flower thrips
Thrips tabaci [vect.]	onion thrips

Fungus

Oomycota

Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak

Virus

-	
-	
-	
	-
tobacco ringspot nepovirus [strain] [VO]	
tomato spotted wilt tospovirus [strain] [VO]	-

Phytoplasma

-
-
-
tomato big bud phytoplasma -

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida
Acarina
Eriophyidae

Aculus lycopersici	tomato russet mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tetranychidae

Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Mycosphaerellaceae

Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot

Hypocreales
Hypocreaceae

Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot

Leotiales
Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot

Saccharomycetales
Dipodascaceae

Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot

Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae

Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot

Stereales
Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae

Lasiodiplodia theobromae	fruit and stem-end rot

Macrophomina phaseolina	ashy stem blight

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae

Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot

Moniliaceae

Verticillium dahliae	verticillium wilt

Tuberculariales
Tuberculariaceae

Fusarium oxysporum	leaf spot

Unknown Hyphomycetes
Unknown Hyphomycetes

Trichothecium roseum	pink rot

Zygomycota: Zygomycetes
Mucorales
Mucoraceae

Rhizopus stolonifer	rhizopus soft rot

Non-regulated non plant pests

None

WATERMELON
Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for watermelons. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during AQIS pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the NZ BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle

Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite

Tetranychidae

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Ascochyta spp.	-
Phomopsis cucurbitae	--

Oomycota

Pythiales

Pythiaceae

Pythium spp.	pythium rot

Bacterium

-

-

Enterobacteriaceae

Erwinia tracheiphila	bacterial wilt

Pseudomonadaceae

Acidovorax avenae subsp. *citrulli*	bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta

Hymenoptera

Formicidae

Solenopsis geminata	fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta

Coleoptera

Curculionidae

Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil

Collembola

Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite

Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Pleosporaceae
Leptosphaerulina trifolii — seed rot
Unknown Dothideales
Didymella bryoniae — cucumber stem rot
(anamorph *Phoma cucurbitacearum*)
Erysiphales
Erysiphaceae
Erysiphe cichoracearum — powdery mildew
(anamorph *Oidium asteris-punicei*)
Hypocreales
Hypocreaceae
Nectria haematococca — fusarium fruit rot
(anamorph *Fusarium solani*)
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana — grey mould
(anamorph *Botrytis cinerea*)
Sclerotinia sclerotiorum — cottony rot
Phyllachorales
Phyllachoraceae
Glomerella cingulata — bitter rot
(anamorph *Colletotrichum gloeosporioides*)
Glomerella lagenaria — --
(anamorph *Colletotrichum orbiculare*)
Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae
Thanatephorus cucumeris — rhizoctonia rot
(anamorph *Rhizoctonia solani*)
Stereales
Atheliaceae
Athelia rolfsii — Rolf's disease
(anamorph *Sclerotium rolfsii*)

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales

Sphaerioidaceae
Phoma exigua — phoma rot
Septoria cucurbitacearum — --

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Alternaria cucumerina — --
Moniliaceae

Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Bacterium	
-	
-	
Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI
Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate dip) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for zucchinis and scallopinis. AQIS can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested zucchini fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place of rest.
4. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on zucchini fruit during AQIS pre-export inspection.

Note: item 3 above does not apply to zucchini and scallopini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 11(winter window) to the NZ BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Zucchinis exported to New Zealand under Appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during AQIS pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by AQIS/MAF.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Aphis gossypii [vect.]	cotton aphid
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Bactrocera cucumis	**cucumber fruit fly #**
Bemisia tabaci	**sweet potato whitefly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite

Tetranychus kanzawai	**kanzawa mite #**
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite

Tomato big bud phytoplasma

Tobacco ringspot nepovirus [strain] [VO]

Non-regulated pests

Pest Scientific Name	**Common Name**
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	whitefringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph *Phoma cucurbitacearum)*	cucumber stem rot
*Dipodascus geotrichum (*anamorph *Geotrichum candidum)*	sour rot
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot

*Erysiphe cichoracearum (*anamorph *Oidium asteris-punicei)*	powdery mildew
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	
*Gibberella acuminata (*anamorph *Fusarium acuminatum)*	fusarium storage rot
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker
*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
*Thanatephorus cucumeris (*anamorph *Rhizoctonia solani)*	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

 # Denotes high impact pest

ATTACHMENT 2 FORMS

2.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional AQIS office**			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
EMAIL ADDRESS			
POSTAL OR BUSINESS ADDRESS			
		POST CODE	
PROPERTY ADDRESS			
		POST CODE	
REAL PROPERTY DESCRIPTION (of area under planting – please attach detailed maps)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the arrangement and the Systems Operation Manual as amended and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	Pumpkin
Strawberries	Rockmelon	Honeydew melon	Cucumber
Scaloppini			

AQIS Inspector: …….

Signature: ……

Regional Office: …….

Date: …….

Authorised stamp

2.2 APPLICATION FOR REGISTRATION OF: PACKHOUSE / FREIGHT FORWARDER / LOAD OUT FACILITY / EXPORT INSPECTOR (DELEGATE)

Please post or fax this form to your local regional AQIS office		
NAME		
AQIS EXPORT ESTABLISHMENT NUMBER (if applicable)		
EMAIL ADDRESS		
POSTAL ADDRESS		
	POST CODE	
PREMISES ADDRESS		
	POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a (circle as appropriate) packer / freight forwarder / load out facility / delegated export inspector for (commodities)…….. for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

The following persons are hereby nominated as those responsible for upholding requirements within the SOM.

Name	**Responsibility** (circle as appropriate)
……	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……	Product Integrity / Load Out / Export Inspection

I have read the arrangement and the Systems Operation Manual as amended and agree to be bound by the conditions and restrictions contained therein as they apply to packhouses / freight forwarders / load out facilities / delegated export inspectors. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

AQIS Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION

APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW **Please post or fax this form to your local regional AQIS office**			
NAME OF TREATMENT CENTRE			
AQIS EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
		POST CODE	
PREMISES ADDRESS			
		POST CODE	
DECLARATION I/We, ... hereby apply for registration as a treatment centre as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry. I have read the arrangement and the Systems Operation Manual as amended and agree to be bound by the conditions and restrictions contained therein as they apply to treatment centres. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.			
SIGNATURE		**DATE**	
WITNESS		**DATE**	
Treatment Type (please specify)			
Methyl Bromide Fumigation Cold Storage	Dimethoate Irradiation		

AQIS Inspector: …….

Signature: ……

Regional Office: …….

Date: …….

Authorised stamp

2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the NZ BQA to perform field monitoring advisory services to growers registered by AQIS for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the NZ BQA Systems Operation Manual as amended and have the ability to recognise and identify the regulated pest and weed seeds of concern to New Zealand.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to NZ BQA registered growers available to AQIS/MAF for auditing purposes.

I/We agree to notify AQIS immediately should any NZ BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the NZ BQA and the instructions contained in the Systems Operation Manual for NZ BQA.

Signature .....

Printed Name ..... Date .....

AQIS Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

Page 1 of 2

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Australian - New Zealand Bilateral Quarantine Arrangement and the NZ BQA Systems Operation Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, AQIS must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the NZ BQA and the Systems Operation Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for NZ BQA commodities will provide properly identified inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection

The following parties and persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	Company	Commodity	Address
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Page 2 of 2

Treatment Supervision Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the NZ BQA for and on behalf of this Company.

Company	Commodity	Address
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Loading Supervisory Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of NZ BQA commodities as is required by the NZ BQA and the contents of this Manual.

Company	Commodity	Address
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the NZ BQA and the Systems Operation Manual as amended required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

AQIS Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.6 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Tick

Date	Trade Description .....
Commodity	Commodity .....
No of Cartons	Registered Grower No. .....
Registered Grower No.	Registered Packing Establishment .....
	.....
Ex 28/RFP Number/s:	Australian Origin .....
.....	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250
Exporter/s	(Tick one) .....
	Exporter Inspection completed by:.....
	(a) Exporter
Inspector Name	(b) ED (name)
(Block Letters)	**Inspected by**:
.....	Grower Line .....
Inspector's Signature	Consignment Line .....

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NR**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed ☐ **Failed** ☐ **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Regulated Pest
****Please note, this is a template only: packhouse/ exporters are permitted to formulate their own copies of this template, provided all of the above information is contained. This form will be checked and approved at audit**

2.7 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	**Number of Cartons/Commodity**	**Temperatures Taken ***

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Australian Quarantine and Inspection Service and the New Zealand Ministry of Agriculture and Forests concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

2.8 COLD DISINFESTATION RECORD

COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKHOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0C$.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

2.9 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by AQIS inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand should I/we wish to re-enter the Arrangement protocol at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in block letters	Signature	Date
.....	.....	.....

Voluntary Withdrawal

I/we agree my/our property is no longer required to be registered under the terms and conditions required for the New Zealand export trade for NZ BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand should I/we wish to re-enter the Arrangement at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in Block letters	Signature	Date
.....	.....	.....

AQIS OFFICE DOCUMENTATION	Authorised person or
Fax / e-mail to State Office	Inspector's Signature
Appropriate Exporters Advised (State Office)	
Grower Deleted from Active Register (State Office)	.....

2.10 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection/audit of the following property/premises:- (Grower – Packer – ED – Treatment Centre – Exporter – Freight Forwarder – Other ……) (select appropriate title)

Name .....
Address .....
.....
.....
Reg No .....

I believe for the following reasons that the entity outlined above no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) they (please indicate):

have no intention to correct the above mentioned deficiency in the immediate future

OR

are suspended until corrective action has been implemented and successful re-audit has been undertaken

I hereby declare the entity outlined above is suspended from Appendix …….. (all, 4, 10 etc) of the Australia - New Zealand NZ BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Representative Name	Representative Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

2.11 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY THE TRANSFER OF DIMETHOATE TREATED COMMODITIES

I, ...of .....……

.....……...

hereby declare that the ..... cartons of

……..tomatoes/capsicums/cucumbers/rockmelons/hodewdew melons/scallopinis (circle as

applicable) consigned to..... .....……...on

..... (date) were harvested from the following registered

blocks……..

…… AND

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute (tomatoes only).

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

3. further declare ..... (insert name of supervisor) a designated person nominated by..... (insert name of exporter) has supervised the loading of this consignment for transport to .....….....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....20.....

Signature ..... Witness .....

2.12 CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28/RFP Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

2.13 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

2.14 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

<table>
<tr><td rowspan="3">Grower name and address:</td><td>Cucurbit type (please tick ✓)
Cucumber ☐
Honeydew melon ☐
Rockmelon ☐
Scallopini ☐
Watermelon ☐
Zucchini ☐</td><td>Treatment (please tick ✓)
Appendix 3 & 10 (methyl bromide) ☐
Appendix 4 & 10 (dimethoate dip) ☐
Appendix 10 & 11 (winter window) ☐</td></tr>
<tr><td colspan="2">Declaration

I,……hereby declare the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.

…… ……/……/……
Signature Date</td></tr>
<tr><td>Grower number:</td></tr>
<tr><td>Consignee name and address:</td><td colspan="2"></td></tr>
</table>

Production block number	Package type (carton, bin etc)	Number of packages	Total mass

2.15 NZ - FRUIT SENSOR RECORD OF CALIBRATION

Date & Time of Calibration

……..**.....**

Phytosanitary Certificate No / RFP:

……..**.....**

Treatment Facility / Container No:

……..**.....**

If a Container verification that the clock is set to GMT (Y/N): ……..

Container Recorder Serial No: ……

Commodity / Quantity:

……..**.....**

Calibration results:

Sensor ID	First reading	Second reading	Correction factor
1	……..	……..	……..
2	……..	……..	……..
3	……..	……..	……..

Comments:

……..**.....**

……..**.....**

……..**.....**

AQIS Inspector …….

Signature ……

Australia – New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual 6D

This systems operation manual incorporates the New Zealand import health standards for Australian fruit fly host material and the Department of Agriculture, Fisheries and Forestry's operational requirements.

This manual is maintained and controlled by the DAFF Plant Programs Section in Canberra.

Systems Operation Manual (SOM)

TABLE OF CONTENTS

DISTRIBUTION OF MANUALS - CONTROLLED COPIES 6

AMENDMENT RECORD 9

GLOSSARY OF TERMS 10

DEFINITIONS 11

INTRODUCTION 12
Scope of the Manual 12

SECTION 1 12
1.1 Pest categories 12
1.1.1 Risk Group 3 (RG3) Pests 13
1.1.2 Risk Group 2 (RG2) Pests 13
1.1.3 Risk Group 1 (RG1) Pests 13
1.1.4 Non Regulated Pests 13
1.1.5 Regulated Pests 13
1.2 Maximum pest levels 14
Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS 14
1.3 Contaminants 14

SECTION 2 TREATMENT APPENDICES 15
2.1 Summary 15
Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES 16
2.2 Appendix 1 – Country freedom from fruit fly 36
2.3 Appendix 2 – Area freedom districts within Australia 36
2.3.1 General requirements 36
2.3.2 Approved area freedom districts 37
2.4 Appendix 3 – Fumigation 38
2.5 Appendix 4 – Dimethoate 38
2.6 Appendix 5 – Cold treatment 38
2.7 Appendix 6 – Non host 38
2.9 Appendix 8 – Not currently in use 39
2.10 Appendix 9 – Not currently in use 39
2.11 Appendix 10 – Field control programs 39
2.12 Appendix 11 – Winter window 39
2.13 Appendix 12 – Irradiation 39

SECTION 3 GROWER RESPONSIBILITIES 42
3.1 Summary 42
3.2 General requirements 43
3.3 Registration 43
3.4 Orchard responsibilities 43
3.4.1 Citrus growers 44
3.4.2 Avocado growers 44

3.5 Audits 44
3.5.1 Non Compliance 45
3.5.2 Packhouse Approved Arrangement systems 45
3.5.3 Security and supervision 46

SECTION 4 CROP MONITOR RESPONSIBILITIES 47
4.1 Registration 47
4.2 Audit 47
4.3 Non Compliance 47

SECTION 5 PACKHOUSE RESPONSIBILITIES 48
5.1 General requirements 48
5.2 Documentation 48
5.3 Delegation of exporter responsibilities 48
5.3.1 General 48
5.3.2 Security and supervision 49
5.3.3 Inspection 49
5.4 Audit 49
5.4.1 Non Compliance 50
5.5 Approved Arrangements – Packhouse 50
5.5.1 General requirements 50
5.5.2 Audit 50
5.5.3 Inspection requirements 51
Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS 51
5.5.4 Documentation 52
5.5.5 Post treatment security 52

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES 54
6.1 General requirements 54
6.2 Registration 54
6.3 Audit 54
6.3.1 Non Compliance 54
6.4 Post treatment security 54
6.4.1 Registration 54
6.4.2 General requirements 55
6.5 Post treatment transportation 55
6.6 Treatment Appendices 56
6.6.1 Appendix 3 – Fumigation 56
Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES 56
6.6.2 Appendix 4 – Dimethoate 57
Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES 57
6.6.3 Appendix 5 – Cold treatment 59
Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS 60
Table 7 – CONTINGENCY TREATMENT OPTIONS DURING MEDITERRANEAN FRUIT FLY OUTBREAKS WITHIN AREA FREEDOM DISTRICS 60
Table 8 – CONTINGENCY TREATMENT OPTIONS DURING QUEENSLAND FRUIT FLY OUTBREAKS WITHIN AREA FREEDOM DISTRICS 60
6.6.3.6 On-shore cold treatments 61
6.6.3.6.2 DAFF supervision 62
6.6.3.6.3 Record Requirements 62

6.6.3.7 In-transit cold treatments 62
Attachment to section 6.6.3.7.1 64
6.6.4 Appendix 12 – Irradiation 65
6.7 Tablegrape Fumigation Requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti* 66
6.7.1 General requirements 66
6.7.2 Treatment 67
6.7.3 Traceability 67
6.7.4 Additional precautionary measures 67

SECTION 7 EXPORTER RESPONSIBILITIES 68
7.1 General requirements 68
7.2 Exporter Inspection 68
7.2.1 Split Consignment Inspections 69
7.3 Documentation 69
7.4 Rejected Produce 70
7.5 Security of Produce 70
7.6 Audit 71
7.6.1 Non-compliance 71

SECTION 8 GOVERNMENT RESPONSIBILITIES 72
8.1 DAFF Canberra office (Horticulture Export Program) 72
8.1.1 Director – Horticulture Export Program 72
8.2 DAFF Regional Offices 72
8.2.1 Registration requirements 73
8.2.2 Sampling requirements 73
8.2.3 DAFF inspection procedures 73
8.2.4 Consignment line samples 74
8.2.5 Rejection procedures 74
8.3 Audit 75
8.3.1 Audits after Product Rejections by DAFF 75
Table 9 - DAFF AUDIT FREQUENCY 75
8.4 Fruit Fly Area Freedom – State Departments 77
8.4.1 Validation of Area Freedom 77
8.4.2 Trapping 77
Attachment to Section 8.1 DAFF Plant Contact List 79

ATTACHMENT 1 NEW ZEALAND PEST LIST 80
AVOCADO 80
BANANA 85
CAPSICUM 88
CITRUS 97
CUCUMBER 103
GRAPE 111
LYCHEE 119
MANGO 120
MELON 123
PAPAYA 131

ATTACHMENT 2 FORMS 161
2.1 APPLICATION FOR GROWER REGISTRATION 161

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION 163
2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 164
2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT 165
2.6 INSPECTION RECORD 167
2.7 FUMIGATION RECORD 168
2.9 WITHDRAWAL NOTICE 171
2.10 SUSPENSION NOTICE 172
2.11 DECLARATION OF DIMETHOATE TREATMENT 173
2.12 CONTAINER REPORT SHEET 174
2.14 CUCURBIT GROWER DECLARATION 176
2.15 COLD TREATMENT RECORD OF CALIBRATION 177

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New South Wales Agriculture Attn s. 47F(1) s. 47F(1) @industry.nsw.gov.au	Locked Bag 21 Orange NSW E-mail:
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DAFF Western Australia Technical Exports Manager - Horticulture	PO Box 606 Welshpool WA 6106

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Senior Advisor
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E-mail: s. 47F(1) @mpi.govt.nz

Plant Biosecurity
Biosecurity Plant Division
Attn s. 22(1)(a)(ii)

Canberra Office
E-mail: s. 22(1)(a)(ii) @daff.gov.au

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AMENDMENT RECORD

Amendments to this manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	s. 22(1)(a)(ii)	18 June 1999
2		14 July 1999
3		27 April 2000
4		March 2001
5 5A 5B 5C		29 April 2002 March 2002 December 2004 January 2006
6 6A 6B 6C 6D		August 2006 August 2007 March 2011 May 2011 July 2013
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GLOSSARY OF TERMS

ANVAS	Avocado Nursery Voluntary Accreditation Scheme
AA	Approved Arrangement
DAFF	Australian Government Department of Agriculture, Fisheries and Forestry
Dmin	The localized minimum absorbed dose within the process load
Dmax	The localized maximum absorbed dose within the process load
EXDOC	Electronic Export Documentation
EX28	Notice of Intention to Export/Export Permit
EX161	Inspection advice notice
EX186	Transfer Certificate
EX222	Approved Arrangement equivalent of EX28
ED	Exporter Delegate
Gray (Gy)	Unit of absorbed dose where 1 Gy is equivalent to the absorption of 1 joule per kilogram
IHS	Import Health Standards (New Zealand)
MPI	Ministry for Primary Industries (New Zealand)
MeV	Mega Electron Volt
MAP	Maximum Allowable Prevalence
MICoR	Manual of Importing Country Requirements; Export conditions database
NZ BQA	Australia-New Zealand Bilateral Quarantine Arrangement
RFP	Electronic Request for Permit

DEFINITIONS

DAFF Inspection	An inspection of any number of packages from one exporter from the same treatment pathway presented for inspection at one time.
Consignment line inspection	Inspection consists of commodities from a common treatment pathway. The inspection lot can be made up of different growers provided grower line inspections have been undertaken.
Grower line inspection	Inspection that must be performed prior to DAFF inspection and consists of one grower, one commodity and one treatment pathway.
Phytosanitary certificate	A certificate issued in accordance with Article V of the International Plant Protection Convention or at the request of a foreign country authority.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a hand).

INTRODUCTION

The New Zealand Bilateral Quarantine Arrangement (NZ BQA) is a formal agreement between the Australian Government Department of Agriculture Fisheries & Forestry (DAFF) and the New Zealand Ministry for Primary Industries (MPI), to ensure New Zealand's pre-export requirements are documented. This manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The NZ BQA details a series of treatment appendices that describe the requirements for a particular treatment for fruit fly host material. The structure incorporates developments in relation to the documentation of New Zealand Import Health Standards (IHS) on a commodity-by-commodity basis.

Scope of the Manual

This Systems Operation Manual (SOM) is designed to ensure;

- Only approved fruit fly host commodities are exported to New Zealand;
- Homogeneity of fruit fly host commodity consignments;
- Approved treatments for fruit fly host produce are used;
- Required levels and intensity of inspection of fruit fly host produce are maintained;
- Post treatment security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce;
- Trace back to grower/packer/treatment centre (as appropriate); and
- Accurate phytosanitary certification in accordance with New Zealand requirements

DAFF Regional Offices and State Departments of Agriculture (or equivalents) are to conduct management audits of the systems to ensure state responsibilities are being adequately performed and recorded.

This SOM gives instructions for audit procedures and maintenance of records that will be the responsibility of DAFF Regional Offices, and where applicable State Departments of Agriculture or their equivalents.

SECTION 1

1.1 Pest categories

MPI have commenced the re categorisation of pests as regulated and non-regulated pests. Certain regulated pests are deemed by MPI to be high impact pests which is divided into high impact fruit flies and high impact non fruit fly. High impact fruit fly categorisation is equivalent to the previous RG3 and high impact non fruit fly equivalent to RG2 pest categories.

As MPI review current IHS's the existing risk categories of RG1, RG2 and RG3 will be transcribed into the new categories. At this point in time only the lychee, mango, papaya, zucchini and banana pest lists reflect this new terminology.

1.1.1 Risk Group 3 (RG3) Pests

Are pests which upon entry into New Zealand would cause major market access disruption for a wide range of New Zealand commodities and/or have significant effects on environment or agricultural production. This group includes species of economically significant fruit flies.

These pests require treatment to be undertaken in Australia with documented procedures to ensure DAFF phytosanitary certification is accurate and auditable by MPI.

If this level pest is detected in New Zealand then the consignment will be re-exported or destroyed and the treatment pathway suspended until such time as an DAFF audit is conducted, and any associated corrective action is undertaken and results accepted by MPI.

1.1.2 Risk Group 2 (RG2) Pests

Are pests which upon entry into New Zealand could cause major market access disruption and/or have significant effects on environment or the agricultural production of a particular commodity.

These pests require some form of management practice to be undertaken (i.e. infield controls, area freedom, or post harvest treatments). An additional declaration to this effect must be made on the phytosanitary certificate.

If this level pest is detected in New Zealand the consignment will be re-exported, destroyed or where appropriate ordered for appropriate treatment. There will be no suspension of trade but a follow up DAFF audit will be conducted to determine cause of the system failure and associated corrective actions undertaken. DAFF may suspend specific commodity pathway until cause of failure is determined and corrective action undertaken.

1.1.3 Risk Group 1 (RG1) Pests

RG1 pests are those pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

These pests require no specific formal treatment or controls, DAFF will inspect for these pests at export inspection, if detected the consignment must be subjected to appropriate treatment/re-conditioning and represented for exporter/exporter delegate (ED) DAFF inspection.

If this level of pest is detected in New Zealand the consignment would be available to be re-conditioned, subject to appropriate treatment (if available), re-export or destroyed.

1.1.4 Non Regulated Pests

These pests have an unlimited tolerance during inspection and are regarded as non-actionable pests between Australia and New Zealand. It should be noted that excessive levels of non-regulated pests may interfere with DAFF inspection and may result in longer inspection times to ensure accurate identification.

1.1.5 Regulated Pests

Regulated pests are regarded as actionable pests between Australia and New Zealand. Actions would be undertaken if they were intercepted/detected. As well as quarantine pests,

these include new organisms as defined by the New Zealand *Hazardous Substances and New Organisms Act 1996*, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants.

1.2 Maximum pest levels

Table 1 details inspection levels and tolerances that will ensure that a 95% confidence level that Maximum Allowable Prevalence (MAP) will not be exceeded.

The sample size must be selected/nominated by the exporter or exporter delegate prior to commencement of inspection and cannot be varied. This sample size must be maintained in all subsequent inspections, including DAFF export inspection.

Table 1: INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weed seeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 – 2000	520	0	≤ 7	0
2001 – 3000	550	0	≤ 7	0
3001 – 4000	560	0	≤ 7	0
4001 – 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

Tolerances for irradiated product listed in Appendix 12.

1.3 Contaminants

Consignments contaminated with soil, or other potential carriers of quarantine pests (eg leaf litter) must not exceed tolerances listed below. The consignment may be reconditioned to remove the infestation. After reconditioning, the consignment must be re-inspected and may be exported if found free from infestation.

Consignment lines contaminated with soil in excess of 25g per 600 units shall be washed free of soil prior to release, re-shipped, or destroyed at the importers options and expense.

Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped, or destroyed at the importers option or expense.

SECTION 2 TREATMENT APPENDICES

2.1 Summary

The NZ BQA is divided into separate treatment pathways, called treatment appendices.

The appendices form the framework for the treatment of commodities for the species of economically significant fruit flies (RG3 pests).

The treatment appendices are treated as separate distinct pathways and as such commodities exported under the same treatment pathways may be inspected together at DAFF inspection. Commodities from separate treatment pathways may not be combined for inspection.

TREATMENT FRAMEWORK
(MARCH 2011)

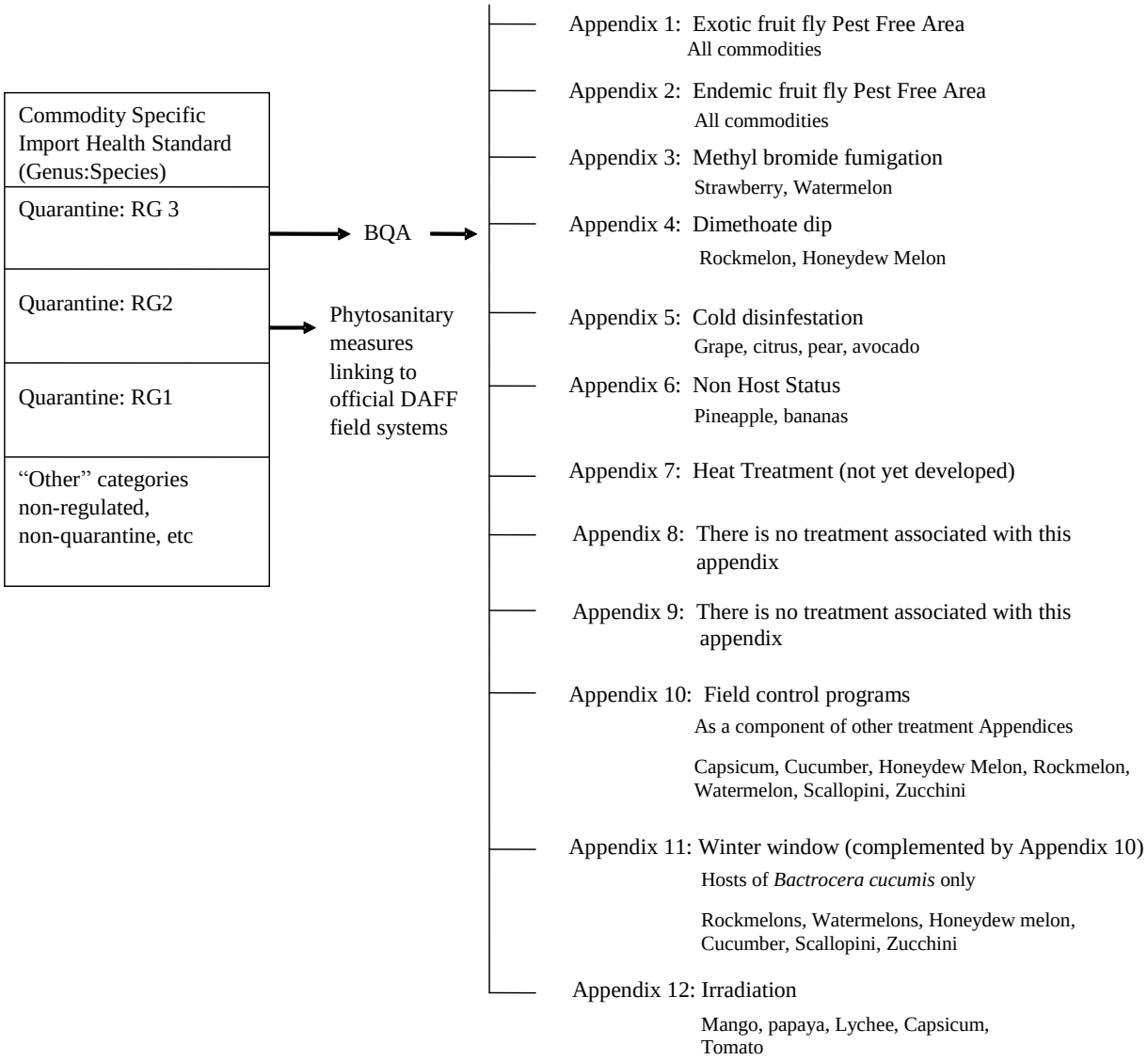


Table 2 - SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Avocado *Persea americana*	Area freedom *Appendix 2*	✓	✓		✓	✓	***EXDOC Endorsement No 1641*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The avocadoes in this consignment have gone through appropriate pest control activies that are effective against Pseudocercospora purpurea and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **OR** ***EXDOC Endorsement No 1582*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Avocado *Persea americana*	Cold storage In-transit cold disinfestation treatment *Appendix 5* 1°C (±0.2°C) for 16 Days	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1649*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The avocadoes in this consignment have gone through appropriate pest control activities that are effective against *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **OR** ***EXDOC Endorsement No 1585*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from *Pseudocercospora purpurea* and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **OR**

							EXDOC Endorsement No 4680 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The avocadoes in this consignment have been sourced from an area free (as verified by official detection survey) from Pseudocercospora purpurea and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the Ministry for Primary Industries New Zealand and the Australian Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 4) Subject to in-transit cold disinfestation. **OR** ***EXDOC Endorsement No 4679*** 1) The avocadoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The avocadoes in this consignment have gone through appropriate pest control activities that are effective against Pseudocercospora purpurea and have been sourced from an approved orchard which has been inspected and found free from symptoms of Avocado sunblotch viroid, 3) The avocadoes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the Ministry for Primary Industries New Zealand and the Australian Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 4) Subject to in-transit cold disinfestation.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Banana *Musa spp*.	Non-host status *Appendix 6*	*✓	*✓	*✓	✓	✓	***EXDOC Endorsement No 1783*** 1) The bananas have undergone appropriate pest control activities that are effective against Pink hibiscus mealybug (Maconellicoccus hirsutus), 2) The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significance in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MPI and DAFF. **OR** ***EXDOC Endorsement No 1802*** 1) The bananas have been sourced from an area free (verified by an official detection survey) from Pink hibiscus mealybug (Maconellicoccus hirsutus), 2) The bananas have undergone an agreed treatment that is effective against associated fruit fly species of economic significance in accordance with Appendix 6 of the Bilateral Quarantine Arrangement between NZ MPI and DAFF. ***** *Growers and packhouses need not be registered if in field controls are not being implemented for pink hibiscus mealybug. If this is the case, bananas must be fumigated prior to export. If fumigation is to occur, the treatment must be undertaken at a facility registered under the BQA.*
Capsicum *Capsicum annuum*	Area freedom *Appendix 2* * If fumigation to occur, grower need not be registered for control of *Lepidopteran* species.	*✓	✓		✓	✓	***EXDOC Endorsement No 1637*** 1) The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The capsicums in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The capsicums in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry for Primary Industries and the Australian Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** *If growers are not controlling Lepidopterean spp (i.e. YPM) fumigation to be carried out prior to export.*

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT		REGISTRATION				ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
*Capsicum *Capsicum annuum*	Irradiation *Appendix 12* *150Gy*	✓	✓	✓	✓	✓	***EXDOC Endorsement No 2531*** 1) The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The capsicums in this consignment have undergone appropriate pest control activities that are effective against Risk Group 2 regulated pests specified by NZ MPI, 3) The capsicums in this consignment have been treated by irradiation at a minimum absorbed dose of 150Gy and have been managed using in-field controls for *Conogethes punctiferalis*, 4) The capsicums in this consignment have been treated in accordance with Appendix 12 of the Arrangement between the New Zealand Ministry for Primary Industries and the Australian Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** Grower and packhouse registration required for Yellow Peach Moth (Conogethes punctiferalis) control, if capsicums are irradiated at this rate.*
Capsicum *Capsicum annuum*	Irradiation *Appendix 12* *250Gy*			✓	✓	✓	***EXDOC Endorsement No 2532*** 1) The capsicums in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The capsicums in this consignment have undergone appropriate pest control activities that are effective against Risk Group 2 regulated pests specified by NZ MPI, 3) The capsicums in this consignment have been treated by irradiation at a minimum absorbed dose of 250Gy for *Conogethes punctiferalis*, 4) The capsicums in this consignment have been treated in accordance with Appendix 12 of the Arrangement between the New Zealand Ministry for Primary Industries and the Australian Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

Citrus *	Area freedom *Appendix 2*	*	✓		✓	✓	***EXDOC Endorsement No 1638*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The citrus in this consignment have undergone appropriate pest control activities that are effective against Citrus black spot (*Guignardia citricarpa*), 3) The citrus in this consignment have been treated in accordance with Appendix 2 of the arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** Nil grower registration required under area freedom appendix, as citrus black spot (Guignardia citricarpa) is restricted to the state of Queensland.* **OR** ***EXDOC Endorsement No 2450*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The citrus in this consignment has been sourced from an area free (verified by official detection survey) from Citrus black spot (Guignardia citricarpa), 3) The citrus in this consignment have been treated in accordance with Appendix 2 of the arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** Nil grower registration required under area freedom appendix, as citrus black spot (Guignardia citricarpa) is restricted to the state of Queensland.*

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
*Citrus	Cold storage In-transit cold disinfestation treatment *Appendix 5* 1°C (±0.6°C) for 16 days Or 0°C or below for not less than 13 days	*✓	*✓	✓	*✓	✓	***EXDOC Endorsement No 1648*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The citrus in this consignment have undergone appropriate pest control activities that are effective against Citrus black spot (*Guignardia citricarpa*), 3) The citrus in this consignment have been treated in accordance with Appendix 5 of the arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ** Grower, packhouse, freight forwarder / load-out registration required only for the state of Queensland, where Citrus Black Spot occurs.* **OR** ***EXDOC Endorsement No 4681*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The citrus in this consignment have undergone appropriate pest control activities that are effective against Citrus black spot (*Guignardia citricarpa*), 3) The citrus in this consignment have been treated in accordance with Appendix 5 of the arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 4) Subject to in-transit cold disinfestation. **OR**

							EXDOC Endorsement No 2451 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The citrus in this consignment has been sourced from an area free (verified by official detection survey) from Citrus black spot (Guignardia citricarpa), 3) The citrus in this consignment have been treated in accordance with Appendix 5 of the arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. **OR** ***EXDOC Endorsement No 2452*** 1) The citrus in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The citrus in this consignment has been sourced from an area free (verified by official detection survey) from Citrus black spot (Guignardia citricarpa), 3) The citrus in this consignment have been treated in accordance with Appendix 5 of the arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 4) Subject to in-transit cold disinfestation.

❖ **GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration**

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Cucumber *Cucumis sativus*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1639*** 1) The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The cucumbers in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Cucumber *Cucumis sativus*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1627*** 1) The cucumbers in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The cucumbers in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The cucumbers in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Grapes *Vitis vinifera*	Area freedom *Appendix 2*	✓	✓		✓	✓	***EXDOC Endorsement No 1574*** 1) The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The grapes in this consignment have been treated in accordance with Appendix 2 (Area freedom) of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 3) The grapes in this consignment have been treated for *Lactrodectus hasselti* (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, 4) The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis*, 5) The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccis hirsutus*.

Grapes *Vitis vinifera*	Cold storage In-transit cold disinfestation treatment *Appendix 5* 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1577*** 1) The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The grapes in this consignment have been treated in accordance with Appendix 5 (Cold storage) of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 3) The grapes in this consignment have been treated for *Lactrodectus hasselti* (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, 4) The grapes in this consignment have undergone appropriate pest control activity that is effective against *Conogethes punctiferalis*, 5) The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from *Maconellicoccis hirsutus*. **OR** ***EXDOC Endorsement No 4677*** 1) The grapes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The grapes in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 3) The grapes in this consignment have been treated for Lactrodectus hasselti (Australian redback spider), using forced air fumigation with a mixture of sulphur dioxide (1%) and carbon dioxide (6%) for 30 minutes, 4) The grapes in this consignment have undergone appropriate pest control activity that is effective against Conogethes punctiferalis, 5) The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from Maconellicoccis hirsutus, 6) Subject to in-transit cold disinfestation.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Honeydew *Cucumis melo*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1640*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Honeydew *Cucumis melo*	Dimethoate ** Appendix 4 & 10* <u>dip only</u> 400ppm, fruit must remain submersed for one minute	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1644*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 4 and Appendix 10 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Honeydew *Cucumis melo*	Winter Window ** Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1628*** 1) The honeydew melons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The honeydew melons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The honeydew melons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Lychee *Litchi chinensis*	Irradiation *Appendix 12* 250 or 350 Gy			✓	*✓	✓	***EXDOC Endorsement No 2298*** 1) The Lychees in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MPI and DAFF. ***** Registration required post treatment.
Mango *Mangifera indica*	Irradiation *Appendix 12* 250 or 350 Gy			✓	*✓	✓	***EXDOC Endorsement No 3287*** 1) The Mangoes in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MPI and DAFF. ***** Registration required post treatment.
Papaya *Carica papaya*	Irradiation *Appendix 12* * 150 Gy	✓	✓	✓	✓	✓	***EXDOC Endorsement No 3425*** 1) The papaya in this consignment have undergone appropriate pest control activities that are effective against Yellow peach moth (*Conogethes punctiferalis*), 2) The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between New Zealand MPI and DAFF. ** Grower and packhouse registration required for Yellow Peach Moth control, if papayas are irradiated at this rate.*
Papaya *Carica papaya*	Irradiation *Appendix 12* 250 Gy			✓	*✓	✓	***EXDOC Endorsement No 3425*** 1) The papaya in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between New Zealand MPI and DAFF. ***** Registration required post treatment.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT		REGISTRATION				ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Pears *Pyrus communis*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No. 1575*** 1) The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The pears in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

Pears *Pyrus communis*	Cold storage In-transit cold disinfestation treatment *Appendix 5* 1°C (±0.6°C) for 16 days Or 0°C or below for not less than 13 days			✓	*✓	✓	***EXDOC Endorsement No. 1578*** 1) The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** Registration required post treatment. OR ***EXDOC Endorsement No 4678*** 1) The pears in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The pears in this consignment have been treated in accordance with Appendix 5 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 3) Subject to in-transit cold disinfestation.
Pineapple *Ananas comosus* (only smooth cayenne)	Non-host status *Appendix 6*					✓	***EXDOC Endorsement No 1579*** 1) The pineapples in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The pineapples in this consignment have been treated in accordance with Appendix 6 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Pumpkin *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1918*** 1) The pumpkins (*Cucurbita pepo*) in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry for Primary Industries. 2) The pumpkins (*Cucurbita pepo*) in this consignment have been treated in accordance with the Appendix 2 of the Arrangement between the New Zealand Ministry for Primary Industries and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Rockmelon *Cucumis melo reticulatus*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1631*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The rockmelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Rockmelon *Cucumis melo reticulatus*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1630*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The rockmelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

Rockmelon *Cucumis melo reticulatus*	Dimethoate *Appendix 4* <u>dip only</u> 400ppm,fruit must remain submersed for one minute			✓	*✓	✓	***EXDOC Endorsement No 1646*** 1) The rockmelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The rockmelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The rockmelons in this consignment have been treated in accordance with Appendix 4 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** Registration required post treatment.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	**TREATMENT**	**REGISTRATION**					**ADDITIONAL DECLARATIONS**
		GR	**PR**	**TR**	**FF**	**ER**	
Scallopini *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1632*** 1) The scallopinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The scallopinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The scallopinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Scallopini *Cucurbita pepo*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 2533*** 1) The scallopini in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia, 2) The scallopini in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 3) The scallopini in this consignment have undergone appropriate pest control activities that are effective against those Risk Group 2 regulated pests specified by NZ MPI.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Strawberry *Fragaria spp*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1573*** 1) The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The strawberries in this consignment have been treated in accordance with Appendix 2 of the arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Strawberry *Fragaria spp*	Methyl bromide *Appendix 3* 48g/m^3 for 3 hours at a temperature of at least 15°C			✓	*✓	✓	***EXDOC Endorsement No 1576*** 1) The strawberries in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The strawberries in this consignment have been treated in accordance with Appendix 3 of the arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia. ***** Registration required post treatment.
Tomato *Lycopersicon esculentum*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1634*** 1) The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry for Primary Industries, 2) The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The tomatoes in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the New Zealand Ministry for Primary Industries and the Australian Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
Tomato *Lycopersicon esculentum*	Irradiation *Appendix 12* 150Gy			✓	✓	✓	***EXDOC Endorsement No 2530*** 1) The tomatoes in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the New Zealand Ministry for Primary Industries, 2) The tomatoes in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The tomatoes in this consignment have been treated in accordance with Appendix 12 of the Arrangement between the New Zealand Ministry for Primary Industries and the Australian Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Watermelon *Citrullus lanatus*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1635*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The watermelons in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Watermelon *Citrullus lanatus*	Methyl bromide Appendix 3 & 10 32g/m3 for 4 hours at a temperature of 21°C to 26°C	✓	✓	✓	✓	✓	***EXDOC Endorsement No 1626*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The watermelons in this consignment have been treated in accordance with Appendix 3 and Appendix 10 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					ADDITIONAL DECLARATIONS
		GR	PR	TR	FF	ER	
* Watermelon *Citrullus lanatus*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 1629*** 1) The watermelons in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The watermelons in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The watermelons in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
Zucchini *Cucurbita pepo*	Area freedom *Appendix 2*		✓		✓	✓	***EXDOC Endorsement No 1636*** 1) The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The zucchinis in this consignment have been treated in accordance with Appendix 2 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.
* Zucchini *Cucurbita pepo*	Winter Window **Appendix 10 & 11* 1 May – 31 Aug	✓	✓		✓	✓	***EXDOC Endorsement No 3339*** 1) The zucchinis in this consignment have been inspected in accordance with appropriate official procedures and found to be free from any visually detectable quarantine pests, specified by the Ministry for Primary Industries New Zealand, 2) The zucchinis in this consignment have undergone appropriate pest control activities that are effective against those risk group 2 regulated pests specified by NZ MPI, 3) The zucchinis in this consignment have been treated in accordance with Appendix 10 and Appendix 11 of the Arrangement between the Ministry for Primary Industries New Zealand and the Department of Agriculture, Fisheries and Forestry concerning the access of host material of fruit fly species of economic significance into New Zealand from Australia.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

2.2 Appendix 1 – Country freedom from fruit fly

MPI recognise Australia is free of several species of fruit fly of economic significance to New Zealand (based on MPI Biosecurity Authority Standard 128.03.07).

Australia's freedom status for these flies is maintained through quarantine restrictions and a national monitoring program. The monitoring program is managed by the Office of the Chief Plant Protection Officer (OCPPO) and consists of exotic fruit fly trapping and monitoring regimes conducted at international airports and seaports.

2.3 Appendix 2 – Area freedom districts within Australia

2.3.1 General requirements

Appendix 2 refers to economic species of fruit flies which are endemic to Australia for which, through trapping and monitoring regimes, area freedom for specific species of fly have been established. The areas listed below have been audited and accepted by MPI as complying with MPI Biosecurity Authority Standard 158.03.06.

Area freedom will be assumed, unless through State Department advice, DAFF notifies MPI to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

An outbreak will have occurred if:

. One or more larvae or pupae are found in locally grown fruit; or
. Five male fruit flies are trapped within 1 km of each other, within a 14-day period; or
. A single female fly is trapped.

In this case, "Area Freedom" will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80km of the outbreak site, **however**

. for State Departments which have managements and control procedures which have been approved by MPI as meeting the requirements and conditions of MPI Biosecurity Authority Standard 158.03.06, the suspension period will be reduced to;

. one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site;

. Should 2 outbreak sites occur within 1 – 3 km of each other a 30km outbreak zone will be applied, the zone will be centred on a point mid-distance between two outbreaks.

State Departments of Agriculture (or equivalent) must report all fruit fly detections in the recognised zones to the DAFF Canberra office within 48 hours of detection and identification. This information will then be supplied to MPI at the earliest opportunity.

2.3.2 Approved area freedom districts

Districts approved by MPI are listed below.

Sunraysia - Victoria and New South Wales

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and areas between.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and areas between.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and areas between.

Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri,Barmera, Waikerie and areas between.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, the Shire of Mildura and areas between.

Area (i) the Mypolonga Township surrounds.

Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

The Ord River Irrigation Area – Western Australia

This area covers the Ord River Irrigation Area (ORIA) as outlined below. This is for Mediterranean fruit fly area freedom only.

Area (j) Ord River Irrigation Area (Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the town site of Kununurra and north-west of the Ord River).

NOTE: **Should any stages of Risk Group 3 fruit fly (alive or dead) be found during DAFF or Industry inspections in Australia, DAFF will inform the relevant State Department of Agriculture of the detection. DAFF will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.**

Should any stages of Risk Group 3 fruit fly (either alive or dead) be found during MPI import inspections, area freedom certification will be suspended for all districts of Australia until an DAFF audit determines the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on results of the DAFF audit.

Should any stages of a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between DAFF and MPI.

2.4 Appendix 3 – Fumigation

This treatment pathway allows the export of watermelons and strawberries to New Zealand. Fruit must be subjected to Methyl Bromide fumigation.

Watermelons exported under this pathway must also comply with Appendix 10 which covers field control programs of fruit flies. Therefore strawberries and watermelons may not be combined for inspection.

Fumigation practices must also be carried out in accordance with the current version of the DAFF Methyl Bromide Standard.

The Standard contains details for effective fumigation procedures and can be found on the DAFF website and via the link on the MICoR database website.

2.5 Appendix 4 – Dimethoate

This treatment pathway allows the export of rockmelons and honeydew melons and to New Zealand. Fruit must undergo mandatory dimethoate treatment. For some commodities this appendix must be used in conjunction with Appendix 10 (field control programs).

2.6 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand. Cold disinfestation treatments can be completed on shore or in-transit.

2.7 Appendix 6 – Non host

This pathway deals with commodities which have been accepted by MPI as non-host of endemic Australian fruit flies. Pineapples of the **smooth cayenne variety** and bananas can be exported under this pathway.

Pineapples have been historically accepted as non-hosts to the fruit fly species of economic significance present in Australia.

Bananas are accepted as being non-hosts to the fruit fly species of economic significance present in Australia when in the unripe stage of maturity.

Bananas must be harvested, packed and exported in the unripe (i.e. mature green) stage to New Zealand. Consignments containing bananas at the colour break to full ripe stage will be rejected for export to New Zealand.

2.8 Appendix 7 Heat treatments

At this time there are no commodities permitted for export under this pathway.

2.9 Appendix 8 – Not currently in use

2.10 Appendix 9 – Not currently in use

2.11 Appendix 10 – Field control programs

The field control programs referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies.**

This appendix is intended to be used in combination with other appendices rather than as a stand alone treatment. For example, honeydew exports to New Zealand under the dimethoate dip treatment require both a post-harvest dip and pre-harvest field control program – a combination of both Appendix 4 and Appendix 10.

Treatment	**Commodity**
Appendix 3 - Methyl bromide fumigation	watermelon
Appendix 4 – Dimethoate	honeydew melon, rockmelon
Appendix 11 – Winter window	rockmelon, honeydew melon, cucumber, watermelon, zucchini, scallopini

2.12 Appendix 11 – Winter window

A "winter window" access period has been negotiated between MPI and DAFF, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly). "Winter window" specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment. The access period is between **1 May and 31 August in any year** (arriving in New Zealand).

Rockmelons, scallopini, honeydew melons, zucchini and **cucumbers** can be exported under this appendix from areas recognised free from Mediterranean fruit fly. Currently areas recognised free of Mediterranean fruit fly are the Ord River Irrigation Area and the states of Queensland, New South Wales, Victoria, the Northern Territory, and Tasmania.

As cucumber fruit fly is the only RG3 pest listed for **watermelons,** this commodity can be exported under this appendix from all areas in Australia.

2.13 Appendix 12 – Irradiation

Mangoes, lychees, papayas, tomatoes and capsicums may be exported under this treatment pathway.

Mangoes and Lychees

The minimum treatment rate, specified by MPI, for mangoes and lychees exported from Australia is Dmin 250Gy. This minimum irradiation rate is deemed to be effective for those fruit flies and regulated arthropods within the commodity pest listings for mangoes and lychees (see Attachment 1).

Tomatoes

The minimum treatment rate specified by MPI for tomatoes exported from Australia is Dmin 150Gy. This minimum irradiation rate is deemed to be effective for all fruit flies.

Capsicum and Papayas

The minimum treatment rate, specified by MPI, for papaya and capsicum exported from Australia is Dmin 150Gy. The 150Gy treatment is accepted by MPI as an effective treatment for fruit fly pests. However, if this rate is chosen, then effective in-field management practices must be undertaken for *Conogethes punctiferalis* (yellow peach moth) prior to export.

A treatment option of irradiation at 250Gy is also available for papaya and capsicum where no in-field YPM control is undertaken. The 250Gy treatment option has been accepted by MPI as effective for fruit flies and *Conogethes punctiferalis*.

Alternative treatment rates

400Gy has been approved as a generic treatment rate for all insects on mangoes, papaya, lychees, tomatoes and capsicum - excluding adult or pupae of Lepidopteran species, Acari (excluding Tetranychidae) and vectoring species (identified as [vect] in the commodity pest lists).

Should efficacy data not be on file for other arthropods irradiated at 400Gy, corrective/treatment actions may need to be instigated prior to DAFF endorsing the consignment or MPI releasing the consignment, should the pest interception be encountered upon arrival in New Zealand.

Vectors

If vectors are found in the consignment during phytosanitary inspection, the consignment must either be rejected for export or fumigated. (Vectors are identified in the SOM pest lists with the following (vect.).

Plant pathogens

If a plant pathogen is found in the consignment during phytosanitary inspection, the consignment must be rejected and is not eligible for export.

Lepidoptera

If Lepidoptera adults or pupae are found during DAFF phytosanitary inspection, the consignment must be fumigated. Where Lepidopteran adults or pupae are detected on-arrival in New Zealand, the effectiveness of the irradiation dose will be subject to review based on the pest intercepted.

Mites

If mites from the order Acari (excluding those from the family Tetranychidae) are found during DAFF phytosanitary inspection, the consignment must be treated at 500Gy or fumigated. Where mites from the order Acari (excluding those from family Tetranychidae) are detected on-arrival in New Zealand the effectiveness of the irradiation dose will be subject to review based on the pest intercepted.

- 400Gy will manage all Tetranychidae
- 500Gy will manage all other Acari

To prevent delays in collating this information, treatment certificates stating Dmin and Dmax doses are to be supplied to MPI with all exported consignments.

Detection of a live arthropod pest in a consignment at inspection by DAFF or MPI, does not necessarily result in the consignment being rejected for export. Sterility of the pest is an acceptable outcome on this treatment pathway and may result in the pest still being alive after treatment.

The Food Standards Australia & New Zealand (FSANZ) *Australia New Zealand Food Standards Code* for irradiated tropical fruits has a Dmax of 1000Gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au and www.foodsafety.govt.nz.

SECTION 3 GROWER RESPONSIBILITIES

3.1 Summary

Treatment Pathway	Commodity	Requirement
Appendix 2 Area Freedom	Avocadoes	Growers must register with DAFF to maintain field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Capsicum	Growers must register with DAFF for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory Methyl Bromide fumigation).
	Grapes	Growers must register with DAFF to maintain field controls for the RG 2 pest *Conogethes punctiferales*. DAFF will certify southern state grapes area free for the RG 2 pest *Maconellicoccus hirsutus*
	Other	Growers are not required to register with DAFF for export under this treatment.
Appendix 3 Fumigation	Strawberries	Growers are not required to register with DAFF for export under this treatment.
	Watermelons	Growers must register with DAFF under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production
Appendix 4 Dimethoate	Honeydews	Growers must register with DAFF under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 5 Cold Treatment	Avocadoes	Growers must register with DAFF to maintain field controls for the RG 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Citrus	Queensland growers must register with DAFF to maintain field controls for the RG 2 pest *Guignardia citricarpa* (citrus black spot). Other state departments survey for citrus black spot, negating the need for grower registration.
	Grapes	Growers must register with DAFF to maintain field controls for the RG2 pest *Conogethes punctiferales* (yellow peach moth). DAFF will be certifying Southern State grapes area free for the Risk Group 2 pest Maconellicoccus hirsutus (hibiscus mealybug).
Appendix 6 Non Host	Pineapples	Growers are not required to register with DAFF for smooth cayenne variety pineapples under this treatment. Growers must keep records verifying smooth cayenne parentage.
	Bananas	Growers are required to register with DAFF to maintain field controls for the high impact non fruit fly pest *Maconellicoccus hirsutus* (pink hibiscus mealy bug).Unless opting for mandatory fumigation.
Appendix 10 In field controls	All commodities	All commodities which require Appendix 10 (In field controls for fruit fly) must be registered.
Appendix 11 Winter window	Rockmelons, honeydew melons, cucumbers, watermelons zucchinis and scallopinis	Growers must register with DAFF under Appendix 11 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 12 Irradiation	Mango, Lychee & Tomato	Growers are not required to be registered under this pathway
	Papaya & Capsicum	Growers must register with DAFF to maintain field controls for Risk Group 2 *Conogethes punctiferalis* (Yellow Peach Moth) if exporters intend to irradiate at 150Gy.

3.2 General requirements

Growers of commodities requiring registration must maintain spray diaries and implement field hygiene requirements that demonstrate appropriate management and recording for those pests listed as RG2 and RG3 in the pest lists (Attachment 1).

3.3 Registration

Application for registration (Attachment 2.1) will be made to the DAFF office in the grower's region. To ensure there are no delays with processing and completing registrations it is recommended that applications be forwarded to DAFF no later than 6 weeks prior to export. Applications are processed in order of receipt; late applications may be subject to delays. Applications must include a property map identifying blocks on which the relevant NZ BQA commodities are grown.

Growers may apply direct to their regional DAFF office or to the packhouse they are supplying. Packhouses must forward any grower applications through to DAFF as soon as possible for inclusion on the regions "master" grower/packer list.

Once application for registration is received regional DAFF staff will organise a time to visit the property to conduct a preliminary audit. During the visit the inspector will ensure the grower(s) are aware of their responsibilities under the SOM, check relevant documentation eg spray diaries, conduct an inspection of the property (registered blocks), and will allocate a grower registration number.

Growers that have previously registered under this arrangement in the previous season without non-conformance will not require a DAFF visit prior to export commencement. However, an audit must be performed early in the season.

NOTE: **In the above circumstance, growers MUST notify DAFF of their intent to commence export at least 6 weeks prior to export. Growers must provide evidence that required control measures have been carried out (eg spray diaries). If DAFF approval is granted, a time for an audit visit will be organised. Failure to comply with these directions may mean growers, irrespective of previous participation, will require an "initial audit" before being allowed to commence export.**

3.4 Orchard responsibilities

Growers must apply recommended field controls a minimum of 4 weeks prior to commencement of harvest. Field monitoring and spray diary records must be kept for all activities relating to registered blocks. The applicable grower declaration form (Attachments 2.13, and 2.14) for the product must be completed and accompany each consignment of product intended for export.

NOTE: the Queensland Government Department of Agriculture, Fisheries and Forestry previously issued a farm note (F76/DEC92) which detailed requirements for field control programs against infestation of *Bactrocera cucumis*, these constituted the minimum requirements for the control of fruit fly. This farm note is no longer in print but the requirements are still accepted by the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF). Newer chemicals developed and registered for the control of fruit fly may be utilised. All spray programs to meet DAFF requirements must be carried out at the recommended label rates. All activities relating to field controls must be recorded and held on file for a 12 month period.

Growers are permitted to use the services of a state registered crop monitor. Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered grower. Records including spray regime and recommendations must be available to DAFF upon request.

NOTE: All cartons of produce must be marked with grower number and packhouse number to enable traceback.

3.4.1 Citrus growers

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer) — however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the southern states of New South Wales, Victoria and South Australia are not specifically required to be registered for this program, monitoring and spray diaries must be kept.

3.4.2 Avocado growers

All avocadoes must be sourced from growers and blocks registered with an official tree certification scheme (such as the Avocado Nursery Voluntary Accreditation Scheme or relevant state departments) to ensure freedom from avocado sun blotch viroid and undergone appropriate pest control activities that are effective against or been sourced from an area free (verified by an official detection survey) from cercospora spot blotch (*Pseudocercospora purpurea).*

In addition to the standard grower requirements listed in Section 3.3, avocado growers must supply the following documented evidence for registration:

- grower maps to include indexed and non-indexed fruit;
- official verification of orchard freedom from sun blotch viroid;
- sterilisation procedures between indexed and non-indexed blocks;
- buffer zone/s between indexed and non indexed blocks (i.e. row spacing between blocks); and
- pruning procedures to prevent sun blotch viroid re-infestation (i.e. no foliage or fruit contact with soil or neighbouring avocado trees)

NOTE: Further details on avocado accreditation for sun blotch viroid can be sourced from the Australian Avocado Growers Association or State Government Departments of Agriculture (or equivalents).

3.5 Audits

DAFF will audit growers to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency*

Growers will receive an initial audit prior to season commencement (or early in export season if previously registered subject to conditions above) and one further audit during the season.

For winter window commodities, DAFF will undertake monthly audits of the property throughout the growing/harvesting season in the initial season (where substantial compliance is recorded then audit frequency will be reduced to 2 monthly intervals).

DAFF will conduct audits of registered growers throughout the growing/harvesting season. All audits of growers will be charged at standard fee for service rates, these details are available from DAFF regional offices or www.daff.gov.au\export.

NOTE: the DAFF audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure the requirements of the new treatment are being met, and to identify any problems or potential problems with implementing the treatment.

All DAFF audits will be "announced" giving the grower at least two days notice.

Unannounced monitoring audits may be conducted if they are deemed necessary by the Regional Export Manager. Unannounced monitoring audits are not chargeable unless major non-conformities have been recently identified, or are detected during the audit.

DAFF audits of grower responsibilities may be conducted simultaneously with packhouse and/or exporter audits.

NOTE: Where a grower elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the DAFF regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

3.5.1 Non Compliance

If minor non-compliances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-compliance is identified, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A grower found to be not managing orchard(s) in accordance with this manual, through consistent non-compliances, may be suspended from the New Zealand export program.

The timing of the follow up audit is dependent on the problem and its relationship to growing/harvesting of the current crop. DAFF inspectors will determine if follow up audits are required.

3.5.2 Packhouse Approved Arrangement systems

Where a packhouse has an Approved Arrangement (AA) with DAFF and is packing a commodity for which grower registration is required, the packhouse must register and audit growers in the following manner:

. on initial registration;
. following registration at least once during the growing season; and
. in subsequent seasons once during each growing season.

During DAFF auditing of AA establishments, a sample of registered growers will be reviewed for compliance with the requirements of the SOM. If a major non-complianceis detected, the suspension of the packhouse may be considered necessary as it is the packhouse that is responsible for ensuring compliance with DAFF/New Zealand requirements. DAFF audits of growers registered by the packhouse will be conducted on the following basis:

. in the initial year of registration – 5% of all growers;
. subject to compliance the previous year – 2½% of all growers;
. if non-compliances were detected at a previous audit – increase random selection of growers to 10% of all growers.

3.5.3 Security and supervision

Security of commodities requiring field control programs (i.e. Appendix 10), or where the treatment pathway is management practices (i.e. Appendix 2 and 6), will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

SECTION 4 CROP MONITOR RESPONSIBILITIES

4.1 Registration

Crop monitors must register with DAFF (Attachment 2.4) to undertake crop monitoring duties for the NZ BQA.

A crop monitor will include in their application, details of relevant registered growers and the commodities covered.

4.2 Audit

Crop monitors will provide registered grower property records upon DAFF/MPI request. DAFF will perform random audits of each registered crop monitor at least once per year/season for each commodity field monitoring service provided. Audits will include randomly selected growers.

If three growers (minimum) are covered by the same crop monitor, and audits reveal substantial compliance, additional grower audits of the crop monitor may be waived by the Export Manager for that year/season.

All audits of crop monitors will be charged at standard fee for service rates.

Where a crop monitor elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the DAFF regional office within a minimum of 10 working days prior to the date of effect.

4.3 Non Compliance

If minor non-compliances are detected at audit, corrective action must be taken and a follow up audit conducted within 7 days. If major non- compliances are detected, the Canberra office must be contacted as soon as practically possible and an assessment made with regards to immediate suspension until corrective action has been taken.

A crop monitor found to be not meeting responsibilities in accordance with this manual through consistent non- compliances may be suspended from the New Zealand export program.

SECTION 5 PACKHOUSE RESPONSIBILITIES

5.1 General requirements

Packhouses are required to maintain secure conditions for NZ BQA commodities and have documented systems in place to ensure grower identification and segregation is maintained.

All cartons must be marked with a standard trade description in accordance with the *Export Control (Plants and Plant Products) Orders 2011* and some form of grower and packhouse identification (including grower and packhouse number if applicable).

In addition to normal DAFF registration requirements under the *Export Control (Plants and Plant Products) Orders, 2011*, packhouses (where applicable) must be registered specifically for New Zealand. Application for registration (Attachment 2.2) will be made directly to DAFF regional offices.

5.2 Documentation

Packhouses are responsible for maintaining all documentation, and must provide to DAFF the following upon request:

i. copy of DAFF endorsed packhouse registration form;
ii. list of growers registered with DAFF who supply to the establishment;
iii. where grower registration is a requirement, a copy of DAFF endorsed grower registration forms;
iv. receival/despatch records of produce from individual growers; and
v.

Export documentation will be held on file for 2 years (minimum) and are subject to DAFF/MPI audit.

5.3 Delegation of exporter responsibilities

5.3.1 General

Where a packhouse has been delegated exporter responsibilities in accordance with directions contained in the SOM, the packhouse must undertake and record all functions delegated to them. Delegated responsibilities may include:

. the security of cleared/treated produce whilst on premise;

. supervision of loading and unloading of all consignments into and out of the packhouse premise;

. clear identification of all New Zealand destined produce;

. documenting all incoming and outgoing produce intended for export under the NZ BQA; and

. inspections.

Packhouses will be audited to ensure requirements for these functions are known.

5.3.2 Security and supervision

The exporter delegate (ED) will arrange appropriate transportation of treated products to ensure no cross infestation or substitution can occur.
Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to Export (EX 28/RFP). A DAFF transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by DAFF.

5.3.3 Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand. A copy of grower line inspection records must be presented to DAFF staff at the time of DAFF inspection.

Exporter inspection may be undertaken at a packhouse when delegated. See Section 7.2 for more details about exporter delegate inspections. A packhouse inspection will satisfy requirements for an exporter inspection if performed by an approved ED. Inspections must be recorded (refer to Attachment 2.6) and retained for audit purposes. A copy of the inspection record must accompany the consignment to the DAFF inspection.

If the exporter (or exporter delegate) opts for DAFF to carry out a consignment line inspection, then copies of grower line inspection records must be presented to staff at the time of DAFF inspection.

5.4 Audit

DAFF will audit packhouses to ensure compliance with NZ BQA requirements. Details of these audits can be found in *Table 7 – Audit Frequency.*

Grower registers, staff training, completion and storage of records and security responsibilities will be audited by DAFF. Variance to audit requirements can be made at the discretion of the Export Manager.

AA packhouses will be audited for compliance with the NZ BQA as per the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP

All audits of packhouses will be charged at standard fee for service rates, these details are available from DAFF regional offices or www.daff.gov.au\export.

DAFF audits of packhouse responsibilities may be conducted simultaneously with grower and/or exporter audits.

NOTE: Where a packhouse elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the DAFF regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

5.4.1 Non Compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A packhouse found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

5.5 Approved Arrangements – Packhouse

5.5.1 General requirements

The following activities must be undertaken by AA packhouses:

(a) All individual packages must include grower numbers and packhouse numbers.

(b) Declared fruit fly free area packhouses must have a register of all growers' names and addresses and allocated grower numbers for all NZ BQA commodities.

(c) Should area freedom suspension zones be established, packhouses must be able to provide separate registers showing growers who are still in area freedom districts against those who are located within the suspension zone(s). Establishment Quality Manuals are required to show procedures for identification, segregation and packing processes to ensure "area free" commodities cannot be contaminated whilst on the establishment and/or surrounds.

(d) It is recommended contingency plans are incorporated within quality manuals to address additional procedures required in the event of fruit fly outbreaks. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference.

(e) Packhouses not undertaking official disinfestation treatments and that do not have Risk Group 2 or 3 pests; will not need to include additional systems to their Quality Manuals.

(f) Packhouses with Risk Group 2 or 3 pests will need to ensure grower registration, commodity segregation; identification and inspections meet the NZ BQA. It is likely some quality manuals will need to be amended or have attached an appendix to meet the new export requirements for NZ BQA.

(g) To gain accreditation, five joint inspections will be undertaken with DAFF to assess the ability of packhouse staff to perform inspections in accordance with the directions contained in the SOM.

AA packhouse conducting "treatments" under the NZ BQA must be registered for this purpose in addition to normal registration requirements. Section 4.7 of the SOM outlines the requirements for Treatment Centres.

5.5.2 Audit

AA packhouses with NZ BQA responsibilities incorporated into their current Quality Manuals will be audited in conjunction with standard auditing requirements.

Those choosing to separate NZ BQA commodity responsibilities from other AA accreditation will have the two systems audited separately but within the usual audit schedules applying to the establishment.

Establishments packing RG 2 pests (host commodities)will have a percentage of those registered growers audited to ensure compliance with the NZ BQA.

Packhouses who elect to register growers of host commodities of Quarantine Risk Group 2 pests must also conduct audits of all their registered growers in the following manner;

. On initial registration,
. Following registration, at least once during the growing season; and
. Continual registration- once during each growing season.

For DAFF audits, registered growers will be randomly selected on the following basis;

. Initial year of registration - 5% of all growers registered by the packhouse
. Subsequent growing seasons- 2.5% of all growers registered by the packhouse (subject to compliance from previous year)
. Non-conformance at a previous audit -10% of all growers registered by the packhouse

Should a major non-compliance be detected at audit, the packhouses will be suspended from the New Zealand program immediately. Depending on the type of non- compliance, suspension from the DAFF AA may be considered. Such a decision will be made by the DAFF AA Contact Officer in conjunction with the Regional Manager and Canberra Office.

5.5.3 Inspection requirements

AA packhouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted when the AA establishment has systems in place that;

. Address grower field controls (horticulture extension officers, reference to crop monitors etc.)
. Have formal receival inspection records
. Have sorter and grader recording systems within the processing line to ensure segregation of grower lines.

In order to properly document inspections for NZ BQA commodities, AA packhouse will undertake “in-line” consignment inspections according to the following table;

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 3 sets out sampling regimes that can be applied as in-line process controls within an AA packhouse. The maximum continuous time run for New Zealand is a 24 hour process. It is extremely

important this type of in-line process control is undertaken and recorded for each consignment run of NZ BQA commodities.

All in-line process controls (Table 3) must be undertaken by an DAFF Approved Inspector. Where inspections are performed as per Table 3, individual grower line inspections are not required.

During inspection, any fruits/vegetables that are soft, bruised or display rot spots will be cut to determine evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all produce cut will be recorded on the inspection sheets.

Packhouse can make up any type of sampling system based on Table 3. **However**, packhouse must document what regime is to be used before the initial production run and ensure the sampling regime is representative of the consignment(s) being assembled.

Packhouse requirements pertaining to identification, segregation, security and records for all NZ BQA produce must be part of the Process Management System submitted for DAFF approval.

NOTE: Packhouses will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

5.5.4 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers will be included on all packages covered by the NZ BQA.

For produce being transferred intrastate or interstate, documentation will be required to ensure the receiving company and DAFF inspector can verify security and integrity of the consignment on arrival. A declaration to the following effect will be made on the “EX 222”or internal transfer note as follows:

"The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by MPI and specified tolerances have not been exceeded."

Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

5.5.5 Post treatment security

Where an AA packhouse has accepted exporter delegation for the security, and loading supervision, of NZ BQA commodities, the packhouse will nominate the person(s) who will be responsible for documenting procedures, carrying out, and recording the following:

. The security of cleared/treated produce whilst on the premises

. Supervision of loading and unloading of all consignments into and out of the premises intended for export under NZ BQA

. Clear identification of all NZ BQA produce

. Documenting all incoming and outgoing produce intended for export to New Zealand

The exporter/ED will arrange appropriate transportation of certified NZ BQA products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of acceptance of duties on file.

For product not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export (Ex 28) and signed by an DAFF inspection officer.

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES

6.1 General requirements

Treatment centres must have documented systems of identification, segregation, process controls, post security treatment and supervision responsibilities.

All staff must be appropriately trained to carry out designated responsibilities.

6.2 Registration

In addition to normal DAFF registration requirements under the *Export Control (Plants and Plant Products) Orders, 2005*, all treatment centres must be registered (Attachment 2.3) specifically for New Zealand. Application for registration will be made directly to DAFF Regional Offices.

6.3 Audit

DAFF will audit treatment facilities to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency.*

Product identification, calibration, load out activity, completion and storage of records, and product security responsibilities will be audited by DAFF. Records pertaining to these aspects will be checked for accuracy at audit. Variance to audit requirements can be made at the discretion of the Export Manager.

All audits of treatment facilities will be charged at standard fee for service rates.

NOTE: Where a treatment centre elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the DAFF regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

6.3.1 Non Compliance

If minor non-compliance are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non- compliance are detected, the Canberra office must be contacted as soon as practically possible, and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A treatment centre found to be not managing their establishment in accordance with this manual through consistent non- compliance may be suspended from the New Zealand export program.

6.4 Post treatment security

6.4.1 Registration

The exporter must nominate, in their application for registration (Attachment 2.5), the person(s) who will be responsible for documenting procedures, carrying out and recording the following:

- security of treated produce whilst on the premises;
- supervision of loading and unloading of all consignments into and out of the premises;

- identification and segregation of consignments intended to be treated; and
- documenting all incoming and outgoing produce intended to be exported to New Zealand.

6.4.2 General requirements

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment

Staff loading containers will ensure minimum time delays in moving commodities from the secure area into container(s). Product must not be left unsecured. Loading procedures must mitigate against potential infestation during container loading. If loading at night, lighting must be of a type that does not attract pests (e.g LED)

Approved security measures for security and transportation of produce will include either;

. Full shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet),

. Full enclosure of each pallet with shade mesh cloth with a maximum opening of 1.6mm (including the surface area between the bottom row of cartons and the actual pallet),

. Loading direct into clean panotech vans/containers with units sealed by DAFF officers

. Cool storing unprotected, at temperatures up to 5°C with a minimum of 1 metre separation between fumigated/treated produce and any untreated product (except commodities treated under area freedom). Signage must be in place in the storage area reiterating this separation requirement.

. Cool storing protected in secure packages at any temperature (except commodities treated under Area freedom)

Should any treatment operator/packhouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Export Manager for assessment and approval.

6.5 Post treatment transportation

The exporter/ED will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

Products transported to another destination for export loading must be subject to strict security provisions. The exporter/ED will ensure the transport medium is clean and other products (i.e. untreated/non-secure commodities), that could cause cross infestation are not loaded without taking appropriate security precautions. That is, either the other commodities are secured or the New Zealand produce is secured (as per Section 6.4.2).

Full details of the secured product will be included on a transfer certificate (EX 186) and/or Notice of Intention to export (EX 28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by DAFF.

NOTE: Export Managers may approve variations to the above documentation requirements to suit a particular state's operations. The use of facsimiles for transferring this information is permitted. Where other than official DAFF documentation is used, it is recommended audits be undertaken frequently to enable confidence within the systems.

Should inspecting officers find breaches to security during transit; consignments will be rejected. For some commodities reconditioning and re-inspection may occur.

DAFF will audit load out facilities to ensure compliance is being maintained.

6.6 Treatment Appendices

6.6.1 Appendix 3 – Fumigation

Fumigation practices must be carried out in accordance with the current DAFF Methyl Bromide Standard. The Standard contains details for effective fumigation procedures and can be found on the DAFF website.

All fumigations must be performed with the amount of product space equal to or less than 50% of total air space within the chamber/tent. Fumigation treatment requirements are detailed in Table 4.

Table 4 - METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES

Temperature	Dose Rates	Times
21 - 26°C and above	32g/m^3	Watermelon - 4 hours
15°C and above	48g/m^3	Strawberry - 3 hours

Treatment facilities must maintain documented systems. Systems will include:

1. Incoming product identification.
2. Segregation from other produce and clearly marked “New Zealand”
3. Treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment (i.e. batch numbers)
4. Treatment records
5. How measuring equipment is calibrated, how often and by whom.
6. Security arrangements after treatment.
7. Maintenance of segregation from untreated product.
8. Supervision and security arrangements at loading.

It is recommended individual procedures accompanied by work instructions be written to define the processes and controls. The following criteria should be considered:

- Address how assessment is made to enable a 50% product capacity, in relation to the overall volume within the chamber or tent,
- Define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack.

- How many units will be sampled to measure lowest flesh temperature of product?
- If tent fumigation is being performed, by whom and when is the tent checked for holes/tears?
- Who, how and when is temperature measuring equipment calibrated? How is this recorded?
- Where the in-process gas monitoring lines are located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?
- Who checks required fumigation dosage rate once temperature and volume are calculated?
- How is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?
- Who is responsible for checking the correct amount of fumigant is entered into the chamber/tent?
- What procedures are applied to ensure no leaks from the chamber or tent are evident?
- What period of time after initial fumigant is released into the chamber/tent will verification readings be made and using what type of equipment?
- Calibration of gas measuring equipment is undertaken how frequently and who does this?
- Calibration details are recorded where?
- At completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?
- Who has the authority to sign off the treatment certificates to enable release of produce?
- How is product identified as being treated?

NOTE: Regional Export Managers may approve variations to the above documentation requirements to suit a particular state's operating requirements.

6.6.1.2 DAFF Supervision

- Flexible tents- DAFF inspection staff will attend all fumigations being undertaken for NZ BQA. Inspection staff will attend either at commencement of fumigation or prior to completion. DAFF will verify treatment dosages, calculations and gas retention general process controls.

- Fixed capacity (chambers or fixed tents)-Treatment centres will be supervised at the commencement of the season, and then, providing substantial compliance is attained 2 - 3 times during the season.

Fumigation centres must advise their regional DAFF office 24 hours in advance of intended fumigation treatments. If DAFF is unable to attend at the required times, arrangements can be made to allow treatment to go ahead but define how DAFF will manage the supervision requirements.

NOTE: After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.2 Appendix 4 – Dimethoate

6.6.2.1 General requirements

Table 5 - PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES

Commodity	Dip strength	Tolerance	Dip/spray	Time
Rockmelon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (±24ppm)	Dip	Submersed for at least 1 minute

Note: The minimum tolerance for dimethoate sample results is 376ppm. Treatment centres will be suspended if samples fall below this level. Treatment centres will only be re-instated once an audit has been conducted to identify the cause of the low concentration. Adequate corrective actions must be documented and instigated by the treatment facility. Reinstatement will occur when DAFF has confirmed the adequacy of corrective actions and when DAFF is in receipt of a conforming dimethoate sample.

Treatment facilities must maintain documented systems. Systems will include:

- Chemical to must be used by expiry date;
- Chemical to be stored at temperatures below 40°C. It has been determined when temperatures rise above 46°C (for even 1 day), the active ingredient will degrade;
- That professional advice (laboratory/manufacturer) has been sought, if using any additives to solution, as these can accelerate the degradation of the active chemical concentrate over time;
- Procedure that ensures that pH levels are checked and adjusted if required, before adding chemical concentrate, as alkaline conditions have an adverse effect on the solution and will increase with time;
- All products will be free of soil;
- The treatment must be the last process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted;
- The treatment centre will nominate a person/s to prepare and record each consignment or batch lot;
- The treatment centre will prepare treatments immediately prior to use and have systems in place for recording solution strengths. The treatment centre will also record details of the mixing of solution and any topping up during processing which allows for chemical wash out. Details will include times and indicate volumes of product treated at the time of topping up.

Each treatment operator will be required to document their method/s of dipping and must include:

- Size of the dip tank
- Method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc)
- Maximum volume of water required for any/each treatment
- Amount of chemical needed to achieve the required ppm level active ingredient
- Minimum allowable solution level
- Maintenance of active ingredient level (i.e. "top up" levels)
- Treatment operators will have a system in place identifying treated and untreated products. Labels must be clear and visible on pallets/bins/crates etc
- After dipping, all products must be identified as being "treated".

NOTE: Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems demonstrating solution can be carried over without losing efficacy.

After treatment all product must be identified as “treated” for identification and traceability purposes.

6.6.2.2 Waxed produce

The application of waxes or oils prior to dimethoate treatment is prohibited. For treated produce, application of waxes or oils will only be allowed at the discretion of the Export Manager.

6.6.2.3 Sampling

Due to the range of commodities exported under this appendix and their seasonal availability, all sampling regimes within the NZ BQA will be applied within the context of a calendar year (Jan – Dec).

All industry dip samples must be taken at the end of a dipping run. DAFF samples where possible (subject to operational constraints), will also be taken at the end of a dipping run. This will provide assurances that all product within the dipping process has been exposed to a solution within the required concentration.

There is no requirement for DAFF inspectors to attend each dimethoate disinfestation treatment. Analysis of chemical dipping strengths, must be verified according to the following sampling guidelines:

DAFF sampling
Initial year of registration: DAFF to be in attendance during the preparation of the first dipping solution. An DAFF dip sample will be taken from this first treatment run. DAFF dip samples must be taken during every month thereafter, while the treatment facility is dipping for export to New Zealand.

Continuous registration: Sampling may be extended to twice during dipping activities in a calendar year, provided that substantial compliance has been previously established.

Industry sampling
Monthly for the first 3 months of export activity, with one additional sample to be taken if the treatment period is greater than 4 months.

6.6.2.4 DAFF audit

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season.

First year of registration: Monthly during the treatment season.

Continuous registration without non-conformance: Twice during the treatment season.

6.6.3 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand.

6.6.3.1 General requirements

Exporters have the option to carry out cold disinfestation treatments on-shore immediately prior to export or in-transit in accordance with the following treatment schedules:

Table 6 - APPROVED COLD STORAGE DISINFESTATION TREATMENTS

Commodity	Fruit Pulp Temperature	Period
Pear, tablegrape, citrus fruits (option 1)	≤ 0°C	13 days
Pear, tablegrape, citrus fruits (option 2)	1°C (± 0.6°C)	16 days
Avocadoes	1°C (± 0.2°C)	16 days

6.6.3.2 Citrus treatment options during fruit fly outbreaks within area freedom districts

If due to a Queensland fruit fly (*Bactrocera tryoni*) or Mediterranean fruit fly (*Ceratitis capitata*) outbreak, DAFF is not able to certify fruit fly area freedom for citrus sourced from districts outlined within Appendix 2 where area freedom from specific species of flies has been established, the following cold disinfestation treatment schedules may apply:

Table 7 – CONTINGENCY TREATMENT OPTIONS DURING MEDITERRANEAN FRUIT FLY OUTBREAKS WITHIN AREA FREEDOM DISTRICS

Commodity	Fruit Pulp Temperature	Period
Lemon only (option 1)	2 °C (± 0.5°C)	16 days
Lemon only (option 2)	3 °C (± 0.5°C)	18 days
Grapefruit, Mandarin, Orange, Tangerine & Tangor (option 1)	2 °C (± 0.5°C)	18 days
Grapefruit, Mandarin, Orange, Tangerine & Tangor (option 2)	3 °C (± 0.5°C)	20 days

Table 8 – CONTINGENCY TREATMENT OPTIONS DURING QUEENSLAND FRUIT FLY OUTBREAKS WITHIN AREA FREEDOM DISTRICS

Commodity	Fruit Pulp Temperature	Period
Lemon and Grapefruit	3 °C (± 0.5°C)	14 days
Mandarin, Orange, Tangerine & Tangor (option 1)	3 °C (± 0.5°C)	16 days

NOTE: Alternate treatment options outlined in Table 7 - 8 apply only to citrus originating from the Sunraysia – Victoria and New South Wales; Riverland – South Australia; Ord River Irrigation Area – Western Australia

6.6.3.3 Temperature recorders

Fruit pulp temperature recorders used for cold treatment must conform to the following requirements:

- able to accommodate the required number of sensors;
- able to record and store data for the duration of each treatment until such time the information can be examined by the appropriate authority;

- capable of producing, or can download the information to produce, printouts which identify each sensor, time and temperature, as well as the identification of the recording unit facility/container number where the treatment was undertaken;
- capable of electronically recording readings at least hourly and identifying the time of recording;
- capable of recording temperature data in increments of 0.1°C

6.6.3.4 Calibration of Temperature Sensors

The calibration of sensors will be conducted using a slurry of crushed ice and distilled water. At least one minute intervals between two consecutive sensor readings must be allowed during the calibration process; however these intervals must not exceed 5 minutes.

Any sensor which reads outside of the range of ± 0.6 °C from 0°C must be replaced by a sensor that meets this criterion.

Calibration of temperature sensors must be carried out under the supervision of DAFF, with results recorded on Form 2.15 - NZ Fruit Sensor Record of Calibration.

6.6.3.5 Loading of containers

Containers must be inspected by DAFF or an authorised load out person prior to loading to ensure freedom from pests and to verify that all vents or other potential entry points for pests are covered. Authorised load out persons must record this container check on Form 2.12 Container Report Sheet.

Containers must be fitted with a tamper proof numbered seal placed on the container door upon completion of loading. The seal number must be noted on the Phytosanitary certificate.

6.6.3.6 On-shore cold treatments

On-shore cold treatments are only permitted to be undertaken at treatment facilities registered by DAFF under the NZ BQA. DAFF will maintain records of all establishments registered for cold disinfestation.

All staff must be appropriately trained to carry out designated responsibilities.

6.6.3.6.1 Placement of fruit pulp temperature sensors

A minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 cu.m. of product or less. For each additional 250 cu.m. of product, or part thereof, one additional pulp sensor will be used;

- The warmest area of each cool storage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One pulp sensor will be placed at the warmest area of the cool store. Further sensors will be placed throughout the load in locations representing different areas of the cool store, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors;
- Care must be taken to ensure that the tip of the fruit pulp temperature sensors are not allowed to extend outside of the fruit

6.6.3.6.2 DAFF supervision

Calibration of sensors for on-shore cold disinfestations must be carried out prior to commencement of treatment and at completion of treatments, with both calibrations supervised by DAFF.

If as a result of re-calibration, any sensor produces a different reading than during the initial calibration, a correction factor will have to be taken into consideration when interpreting treatment read-outs. If the application of a correction factor leads to treatment parameters not having been met, the treatment will be deemed to have failed.

Where a treatment has failed, fruit may be re-treated at the discretion of DAFF and industry. In circumstances where DAFF has documented confirmation that the conditions of the treatment schedule have been maintained since treatment cessation, the treatment may be allowed to continue. Data collection must continue from the time of reconnection of the recording device.

The treatment will be deemed to have begun by DAFF once the chamber has stabilised and all sensors have attained the required treatment temperature.

DAFF will verify, stamp and sign satisfactorily completed treatment records. Both DAFF and the treatment facility are to maintain copies of the treatments on file.

6.6.3.6.3 Record Requirements

Temperature records will be retained and made available for auditing purposes by DAFF/MPI upon request, details of records must include:

- Date and results of temperature sensor calibrations
- Date chamber was loaded with produce
- Type and variety of produce treated, the quantity by lots involved, all to be identified by grower, packhouse and exporter
- Continuous print out records oftemperatures within the chamber throughout the treatment program
- Date produce was cleared from chamber with details of post treatment security and dispatch of produce
- Date and results of re-calibration of sensors following completion of treatment
- Continuous - electronic data log sheets for each cold treatment
- All treated product must be labelled as treated to ensure traceability

Temperature records will be retained and made available for auditing purposes by DAFF/MPI upon request.

NOTE: After treatment all product must be identified as “treated” for identification and traceability purposes.

6.6.3.7 In-transit cold treatments

In-transit cold disinfestations treatments may only be carried out in self refrigerated (integral) shipping containers. These containers must be capable of achieving and maintaining the required cold disnfestation schedules in accordance with the BQA SOM.

6.6.3.7.1 Placement of temperature sensors

Containers must be packed in a manner which ensures that there is even airflow under and around all pallets and any loose stacked cartons. Care must be taken to ensure that the tip of the fruit pulp temperature sensors, are not allowed to extend outside of the fruit.

Records of fruit pulp temperatures are required from at least three locations. Sensors will be placed into average sized fruits under DAFF supervision as follows:

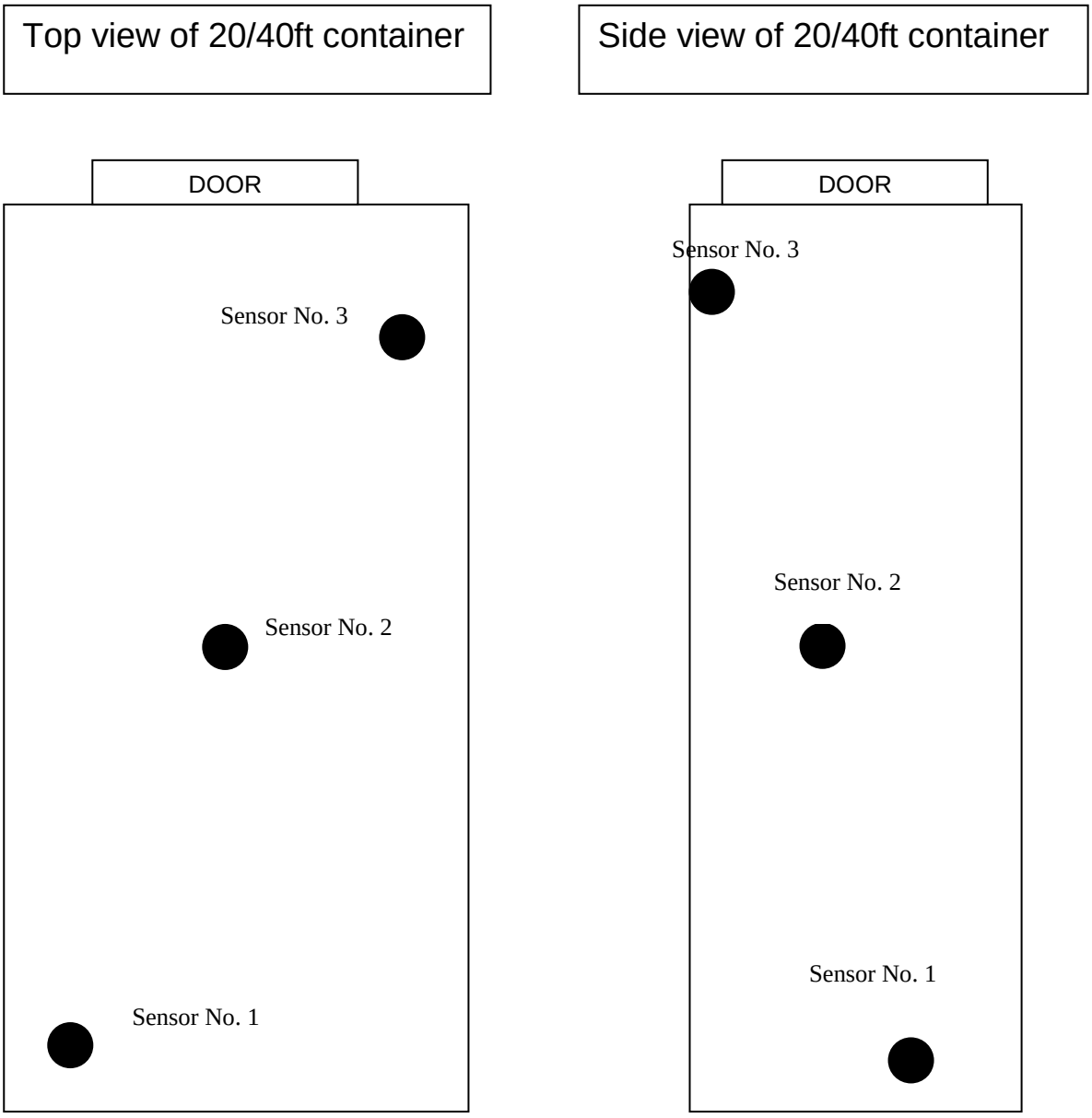
- The sensors must be placed in the following locations in a 40 foot container:
  - Sensor No 1: 1st pallet row, 2-3 cartons down from top, 2-3 cartons in from right side
  - Sensor No 2: 5th pallet row, 4-5 cartons down from top, 3-4 cartons in from left side
  - Sensor No 3: 9th pallet row, 6-7 cartons down from top, 2-3 cartons in from left side.

- The sensors must be placed in the following locations in a 20 foot container:
  - Sensor No 1: 1st pallet row, 2-3 cartons down from top, 2-3 cartons in from right side,
  - Sensor No 2: 3rd pallet row, 4-5 cartons down from top, 3-4 cartons in from left side,
  - Sensor No 3: 5th pallet row, 6-7 cartons down from top, 2-3 cartons in from left side.

On completion of treatments, printouts (or electronic equivalent) of all temperature sensors will be made available to the MPI officer at the port of arrival for final clearance of the container.

Attachment to section 6.6.3.7.1

SCHEMATIC VIEW OF PLACEMENT OF TEMPERATURE PROBES FOR IN-TRANSIT COLD TREATMENT OF FRUIT FLY HOST COMMODITIES FOR EXPORT TO NEW ZEALAND



NOTE: Any container openings must be covered or fitted with fruit fly proof mesh to prevent the entry of pests. Mesh or gauze with openings ≤ 1.6 mm is acceptable.

6.6.4 Appendix 12 – Irradiation

Refer to Section 2.13 Irradiation, for information specifically relating to the approved treatment rates for individual commodities.

The Food Standards Australia & New Zealand (FSANZ) standard for irradiated fresh produce commodities for phytosanitary pest disinfestation has a Dmax of 1000Gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at http://www.foodstandards.gov.au and www.foodsafety.govt.nz

Treatment centres will be required to carry out verification testing to determine the required response on target organisms has been achieved in accordance with International Standard Phytosanitary Measures (ISPM) # 18 - *Guidelines for the use of irradiation as a phytosanitary measure* (www.ippc.int). The records of this verification must be made available to DAFF/MPI upon request.

Ionizing radiation may be provided by radioactive isotopes (gamma rays from cobalt-60), electrons generated from machine sources (up to 10 MeV), or by x-rays (up to 5 MeV) (limits set by Codex Alimentarius). The unit of measurement for absorbed dose is gray (Gy).

Treatment procedures must ensure the minimum absorbed dose (Dmin) is fully attained throughout the commodity to provide the prescribed level of efficacy. Owing to the differences in the configuration of treatment lots, higher doses may be required to ensure the Dmin is achieved throughout the configured consignment or lot.

NOTE: After treatment all product must be identified as "treated" for identification and traceability purposes.

6.6.4.1 Dosimetry

Dosimetry ensures the required Dmin for a particular commodity was delivered to all parts of the consignment. The following conditions for dosimetry systems must be in place:

- Capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax)
- Calibrated in accordance with international standards or appropriate national standards (ISO/ASTM 51261 "Selection and Calibration of Dosimetry Systems for Radiation Processing", ISO/ASTM 51204 "Dosimetry in Gamma Irradiation Facilities for Food Processing" and ASTM guide - F1355 "Irradiation of Fresh Fruits as a Phytosanitary Treatment", and ISPM 18)
- Appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
- Evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
- Consider variations due to density and composition of the material treated, shape and size, orientation of the product, stacking, volume and packaging;
- Dose mapping of the product in each geometric packing configuration, arrangement and product density used during routine treatments must be carried out prior to the approval of the facility. Only configurations approved by DAFF can be used for actual treatments;
- All components of the dosimetry system must be calibrated according to documented

standard operating procedures. An independent organisation recognized by DAFF should assess performance of the dosimetry system;

- An accurate measurement of absorbed dose in a consignment is critical for determining and monitoring efficacy and is part of the verification process. The required number, location and frequency of these measurements should be prescribed based on the specific equipment, processes, commodities, relevant standards and phytosanitary requirements.

6.6.4.2 Dose Mapping

- Dose mapping studies must be conducted to fully characterize the dose distribution within the irradiation chambers and commodity, and demonstrate the treatment consistently meets the prescribed requirements under defined and controlled conditions. Dose mapping data from a minimum of three runs on any particular configuration must be provided to DAFF for verification of Dmin points etc. A minimum of three runs in a physical configuration is required for verification of Dmin (standard).
- Dose mapping must be done in accordance with documented (proven) standard operating procedures. The information from the dose mapping studies is used in the selection of locations for dosimeters during routine processing.
- Independent dose mapping for incomplete (partially-filled) as well as first and last process loads is required to determine if the absorbed-dose distribution is significantly different from a routine load and to adjust the treatment accordingly.

6.6.4.3 Facility records and traceability

Treatment facility operators must keep and maintain records addressing the areas listed below.

- Appropriate treatment records for phytosanitary purposes must be kept by the irradiation facility to ensure traceability of treated lots. Records for every treatment must be kept.
- Dosimetry records must be kept by the treatment facility for at least one full year after treatment. Records must be made available to DAFF on request.

Records kept by treatment centres should also address the following:

- Identification of facility and responsible parties
- Purpose of treatment
- Target regulated pest(s)
- Lot size, volume and identification, including number of articles or packages
- Identifying markings or characteristics
- Quantity in lot
- Absorbed doses (target and measured)
- Date of treatment
- Observed deviations from treatment specification.

6.7 Tablegrape Fumigation Requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti*

6.7.1 General requirements

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern.

MPI have directed DAFF to either undertake stringent field control programs to eliminate this pest or an agreed treatment effective against redback spiders. The Australian tablegrape industry has opted for mandatory fumigation using a sulphur dioxide - carbon dioxide treatment.

In addition to treatment centre registration, fumigators must be licensed by their appropriate State Department Authority for the use of Sulphur Dioxide-Carbon Dioxide fumigants.

Treatment centres carrying out fumigations on tablegrapes must meet the general requirements outlined above for treatment centres and the listed criteria detailed in Section 6.5.1 of the SOM.

6.7.2 Treatment

The mandatory fumigation treatment for redback spiders is a **mixture of 1% Sulphur Dioxide with 6% Carbon Dioxide at ambient temperature (above 18°C) for a period of 30 minutes**.

1% Sulphur Dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6% Carbon Dioxide equals 109.69 grams carbon dioxide per cubic metre.

DAFF inspection staff must sight fumigation treatment records to enable phytosanitary certification of tablegrapes.

6.7.3 Traceability

If a live redback spider is detected during inspection, systems must be in place to allow trace back to individual fumigation treatments.

6.7.4 Additional precautionary measures

Unused packaging carried over to the following season presents an additional pathway for the introduction of Redback spiders into New Zealand.

When carrying unused table grape packaging over, either pest-proofing or disinfestation of the packaging is necessary.

SECTION 7 EXPORTER RESPONSIBILITIES

7.1 General requirements

All exporters of NZ BQA products must be registered with DAFF. Exporter applications (Attachment 2.5) will be made to the appropriate regional DAFF Office.

Applications for registration will include details of the commodities and treatment pathways the exporter intends to use to meet with conditions stipulated in the SOM.

DAFF will accept the application if details of treatment centres are not known at the time, but exports of the particular commodities will not be permitted until relevant information is provided to DAFF.

Exporters are responsible for ensuring that all parties engaged as part of their export pathway, are registered by DAFF (where applicable) for specific purposes in accordance with the SOM.

Regional DAFF offices will endorse BQA registration forms once a registration status has been granted. The endorsed forms will be held by the issuing DAFF office, with a copy provided to the applicant.

Exporters engaging a BQA registered party, must have a copy of the endorsed DAFF registration form on file for auditing purposes. Failure by an exporter to engage an DAFF registered party for specific purposes in accordance with the SOM, may result in a suspension of their export registration status.

Exporters must ensure at all times either directly or by delegation:

. Product security during loading, transport and export consignment consolidation is not compromised and there can be no substitution or cross infestation of product following treatment.

. Exporter inspection requirements as detailed in the SOM are performed by qualified staff and records are kept for all inspections performed.

. Inspection records are given for each grower line presented for DAFF inspection.

. Liaison with DAFF/State Officers takes place as necessary to advise of product movement and inspection requirements,

. Documentation, including phytosanitary certificate endorsements are maintained.

7.2 Exporter Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand, with full details of the inspection to be recorded (Attachment 2.6). A copy of grower line inspection records must be presented to staff at the time of DAFF inspection.

Exporter inspections must be undertaken at an appropriate sampling rate, as given in *Table 1* of the SOM. Exporters need to ensure all staff they delegate inspection duties to, have been audited and approved by DAFF.

If the exporter (or exporter delegate) opts for DAFF to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of DAFF inspection.

During exporter inspections, any soft, bruised or rotted products will be cut to determine evidence of fruit fly infestation. Results of products cut will be noted on the inspection record. A copy of this record must be presented with the consignment for DAFF inspection. Inspection records together with other documentation relating to the consignment must be held on file for 2 years and is subject to DAFF/MPI audit.

All inspections, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10.

NOTE: Accredited AA establishments are not required to undertake end-point inspections if procedures enable a 600 unit in-line inspection and the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

7.2.1 Split Consignment Inspections

Following exporter/ED grower line inspections, exporters can elect a DAFF ‘consignment’ inspection even if the 'consignment' is to be split to varying destinations and differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any produce not forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: "Split consignment" procedures cannot be implemented until DAFF has approved the necessary documentation and record keeping systems.

Exporters/importers wanting to reduce MPI on arrival inspections of split consignments must adopt a system which fully documents the management procedures. Any procedure must include:

. Notification of consignment details to MPI as they occur.

. New Zealand communication links (importer and MPI contacts).

. Flow chart detailing how the phytosanitary certificate moves through the system.

7.3 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers, will be included on all packages covered by the NZ BQA.

A declaration to this effect will be made on the Notice of Intention to Export "Export Permit" (EX 28), EX186 (if appropriate), or in the Exporter Declaration/Comments box in an RFP as follows:

> “The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by NZ MPI and specified tolerances have not been exceeded”

It is important that all manual phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX 28, the exporter must maintain a documented link to the Notice of Intention to Export (EX28). This system must be approved by the Regional Export Manager.

Trace back for electronic phytosanitary certificates drawn from several RFP's is obtained through the EXDOC system.

7.4 Rejected Produce

If any stages of live fruit fly are found during an exporter/ED inspection, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other NZ BQA produce, and identified as not suitable for export to New Zealand unless treatment is available under Appendix 12 (select commodities).

The exporter or ED must immediately notify DAFF of the detection.

DAFF will formally advise and suspend the relevant treatment centre pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

Should during the exporter/ED inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise DAFF. The product must be identified as failed for export to New Zealand and segregated from all other NZ BQA products. Reconditioning of consignment may occur where applicable.

DAFF will formally advise and suspend the relevant grower pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the occurrence, reinstatement for the NZ BQA may be permitted.

The mutual fumigation recognition arrangement can be used when regulated pests are detected. This arrangement cannot be used as a pre-emptive measure.

Note: Irradiation treatment: If live arthropods (including fruit fly) are found on product that has been irradiated, this will not result in rejection of the consignment, if the requiste irradiation rate has been applied (check 2.13 for exceptions).

7.5 Security of Produce

Export shipping or airfreight containers will be inspected by a freight forwarding agent where delegated or exporter for cleanliness and condition (any openings in containers will be taped over).

Container inspections can be delegated to a container park. Persons carrying out inspections must be audited to ensure they are aware of their responsibilities. If inspections are carried out at a container park, copies of completed inspection records must be faxed (or sent with container documents) to point of loading and retained on file by both the container park and exporter/freight forwarder etc.

NOTE: It is only necessary to complete the "Container report sheet" for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

7.6 Audit

Exporters will undergo one audit per year. All relevant documentation for NZ BQA consignments must be made available to DAFF upon request.

Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter inspections and documentation (i.e. RFP's, EX 186, EX28's and phytosanitary certificates).

Persons approved to act as an ED will undergo two audits per year. Audits will include documentation, knowledge of regulated pests, inspection techniques, sample selection and knowledge of relevant parts of the SOM.

NOTE: Where an exporter elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the DAFF regional office within a minimum of 10 working days prior to the date of effect.

7.6.1 Non-compliance

If minor non-compliance are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non- compliances are detected, the Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

An exporter found to be not managing responsibilities in accordance with this manual through consistent non- compliance may be suspended from the New Zealand export program.

SECTION 8 GOVERNMENT RESPONSIBILITIES

This section details the responsibilities associated for participants under the SOM to ensure requirements of the SOM are adhered to.

All systems will be subject to random audits by the DAFF Canberra office and MPI will audit systems at frequent intervals. The audits will include measurement of pathway compliance from growers (where required) through to final export container loading and associated documentation.

8.1 DAFF Canberra office (Horticulture Export Program)

The DAFF organisation structure and management flow chart is provided at the end of this section. It is recommended that each DAFF Regional office develop its own organisation structure and management flow chart as it will apply to the management of the NZ BQA, and include this information for distribution within that state.

8.1.1 Director – Horticulture Export Program

Will be responsible for ensuring;

- All components of the SOM are being complied with consistently, over all commodities and treatments through all states.
- Regular audits of State Departments (where applicable) and DAFF systems are conducted by DAFF Canberra Office to ensure compliance with the conditions and requirements of the NZ BQA and that a proper record management system is available and easily accessible.
- DAFF Regional offices are conducting audits of AA as detailed in the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP and the requirements of the NZ BQA and this manual.
- Where non- compliances are found, that suitable corrective action is undertaken and verified by DAFF.
- Collate and circulate up to date national lists for specific commodities of registered growers, packers, and of all treatment centres and exporters.
- That all amendments to this manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies.
- That audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalents) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in DAFF area freedom certification.

8.2 DAFF Regional Offices

DAFF regional offices, through the Regional Managers and Export Managers located in Queensland, New South Wales, Victoria, Northern Territory, Western Australia, Tasmania and South Australia are responsible for the following:

- The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM.
- Ensure all exporters, treatment centres, packhouse and growers (where applicable), are meeting the requirements of the NZ BQA and the directions contained in the SOM.

- Ensure inspection staff are trained in the terms, responsibilities, and conditions for all NZ BQA commodities being exported from that state.
- Ensure all required components of the export pathways for commodities are registered for that state.
- Ensure audits (including internal audits), are being conducted at the correct frequency and the measurement of the system and corrective action where required, has been effected and recorded.
- Ensuring Canberra Office (Horticulture Export Program Director) is informed where any breaches of the conditions of this manual are observed.
- Ensuring all inspectors in their state, involved in the NZ BQA export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported in any district of Australia.
- Develop a system of recording registrations, and that such records are maintained so they are auditable.
- Ensuring the Canberra office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

8.2.1 Registration requirements

DAFF offices will implement a registration system where applicable for all growers, packhouses, treatment centres and exporters.

8.2.2 Sampling requirements

For the purpose of the treatments detailed in this manual the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

8.2.3 DAFF inspection procedures

Exporters will provide DAFF with exporter/ED inspection records prior to inspection. If all export documentation is not provided or incomplete, the consignment will not be inspected.

If the exporter (or exporter delegate) opts for DAFF to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of DAFF inspection.

Inspections performed by DAFF will be recorded on "Inspection Record - New Zealand" (Attachment 2.6)

NOTE: Alternative types of inspection records can be used as long as they contain the information supplied on the inspection record

DAFF inspectors must conduct inspections at the same sampling rate (Table 1) undertaken by the exporter/ED.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

Packaging must be checked during the inspection for compliance with the *Export Control (Plants and Plant Products) Orders, 2005* and requirements of the SOM.

NOTE: DAFF will lift 5% of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

On the irradiation pathway, Appendix 12, DAFF inspection may be conducted pre treatment OR post treatment.

8.2.4 Consignment line samples

Following exporter/ED inspections, exporters are permitted to present consignment lines to DAFF for inspection and phytosanitary certification. Consignment lines consist of commodities from a common treatment pathway (can be different growers).

Where there is more than one grower or commodity presented for DAFF inspection, the inspector should select sample cartons on the basis of the commodities which may present the greatest risk. The following points may be taken into account in determining selection of sample cartons:

- From the grower submitting the largest grower line within the consignment.
- From the commodity comprising the greatest quantity in the consignment line.
- At least one carton from the commodity seen to present the greatest quarantine risk.
- At least one carton from any known "poorer" performing growers/packers or from a newly registered grower or packer.

Consignment lines passed after DAFF inspection will be identified as "Passed for New Zealand" and immediately segregated. It is recommended exporters implement a system (i.e. stickers on pallets) to make identification of passed consignments easier.

8.2.5 Rejection procedures

A rejection upon inspection by DAFF of either a consignment or grower line does not necessarily indicate a packhouse or grower has breached the conditions of the NZ BQA. However the rejection does indicate a possible problem within the packer/exporter system and will be recorded.

All rejections are to be recorded on DAFF Form Ex 161 (Inspection Advice) and must detail the grower, packer and export pathway through which the commodity has passed.

Exporters/EDs who fail two inspections in any one season must be audited immediately. This will ascertain any reasons DAFF may consider necessary for suspension or corrective actions to be undertaken.

The following conditions will apply for DAFF inspection rejected products:

- Any rejection for RG3 pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of "Area Freedom," all districts in that state are suspended. Audit/s must be undertaken at the earliest opportunity.
  - Under the irradiation pathway, Appendix 12, the detection of an RG3 pest does not result in the suspension of the treatment centre. Irradiation at 150Gy is deemed effective for RG3 pests.
- Any rejection for RG2 pests – DAFF Canberra office to be informed immediately to consider if audit of grower, packer, exporter or ED is necessary. This may depend on type and quantity of

infestation detected. If applicable, the exporter can choose to undertake corrective action (i.e. treatment, withdrawal of the offending grower). Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for DAFF inspection.

- Under the irradiation pathway, Appendix 12, the detection of an RG2 pest does not result in the requirement to undertake corrective action, (except where an RG2 vector is detected).

- Any rejection for RG1/regulated pests - The consignment can be totally withdrawn or corrective action undertaken. Corrective action can include treatment, withdrawal of the offending grower. Re-inspection must be conducted by exporter/exporter's delegate prior to presenting for DAFF inspection.
  - Under the irradiation pathway, Appendix 12, the detection of an RG1 pest does not result in the requirement to undertake corrective action, (except where an RG1 vector or a pathogen is detected). If an RG1/regulated pest under the irradiation pathway is detected at DAFF inspection, pre or post treatment, 400Gy will be required to be applied to the consignment as an effective treatment.

8.3 Audit

DAFF inspection staff will conduct audits of applicable growers, packhouse, treatment centres, exporters and exporter's delegates to ensure compliance with relevant section of this manual.

8.3.1 Audits after Product Rejections by DAFF

Should an audit be considered necessary after rejection by a DAFF officer, the following details will be investigated:

- Exporter/delegate inspection records.
- Grower pest monitoring records and pest control diaries (commodity specific).
- Packer training and associated pest identification.
- General hygiene of premises.
- Segregation and identification of produce.
- Staff responsibilities,
- Exporter or exporter's delegate inspection procedures and pest/weed identification skills.

Should auditing fail to identify any breach of the NZ BQA and responsibility of the SOM, all parties will be reinstated.

Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the Export Manager who will co-ordinate necessary action and advise all parties at the earliest opportunity.

Copies of any audit will be given to the relevant components of the pathway audited and kept on file.

Inspectors undertaking these audits must be appropriately trained and accredited.

Table 9 - DAFF AUDIT FREQUENCY

	Initial Year of registration	**Continuous Registration**	**Winter Window**

Grower	Initial audit prior to export + One additional audit during export period within calendar year	One audit early in new export period (no initial audit required)	Monthly audits of property & spray diaries * Audits extended to 2 monthly if substantial compliance is shown
Packer	Initial audit prior to export + One additional audit during calendar year	Minimum one audit annually	
Treatment Centre	Monthly audits required in first year **Dimethoate -** One initial audit during the first 10 days of season + monthly audits for remainder of calendar year whilst conducting treatments **Irradiation** – One intial audit during the first 10 days of season + two audits for remainder of calendar year	**Fumigation** - One annual audit in first 10 days of export period (to be conducted during a treatment) + 2-3 times during remainder of treatment period within calendar year **Cold Storage** – One annual during first 3 treatments **Dimethoate –** Two audits per calendar year if substantial compliance is shown **Irradiation –** Two audits per calendar year if substantial compliance is shown	
Exporter Delegate	Initial audit prior to export + One additional audit during remainder of calendar year	Minimum two audits per year If fail at two DAFF end point inspections, immediate audit required	
Exporter	One audit Annually	One audit Annually	
Crop monitor	One Audit Annually	One audit Annually	

8.4 Fruit Fly Area Freedom – State Departments

State Departments are responsible for the following:

- Where required, ensure the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual state management plans (as submitted to MPI), the Australian Code of Practice for the Management and Control of Queensland Fruit Fly, and the requirements of MPI Biosecurity Authority Standards 158.03.06 and 158.03.07 and
- Report any detections of economically significant fruit fly species found within trapping grids to DAFF Canberra Office within 24 hours of identification.

8.4.1 Validation of Area Freedom

The following procedures are undertaken to validate area freedom:

. Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. The procedures and controls are documented such that they can be readily demonstrated to, and audited by DAFF Canberra Office and MPI to meet the stipulated Australian and New Zealand Standards.

. Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times.

. Trapping and monitoring programs as recommended in the Australian Code of Practice for the Management and Control of fruit flies and managed under the tri-state agreement between the states of New South Wales, Victoria and South Australia and:

. Reflect the requirements of New Zealand MPI Biosecurity Authority Standard 158.03.06., the
Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or

. Management and control procedures for each area which have been accepted by MPI as meeting all the requirements (or equivalence) with the MPI Biosecurity Authority Standard 158.03.06.

. State Departments must advise DAFF Canberra Office of any amendments to their management procedures at the earliest opportunity. Canberra Office will forward amendments to MPI. Canberra will audit the management practices for fruit fly trapping on a regular basis (minimum annually), against the current copy of the State Department procedures documents, the Code of Practice for the Management and Control of Queensland Fruit Fly and where applicable MPI Biosecurity Authority Standard 158.03.06.

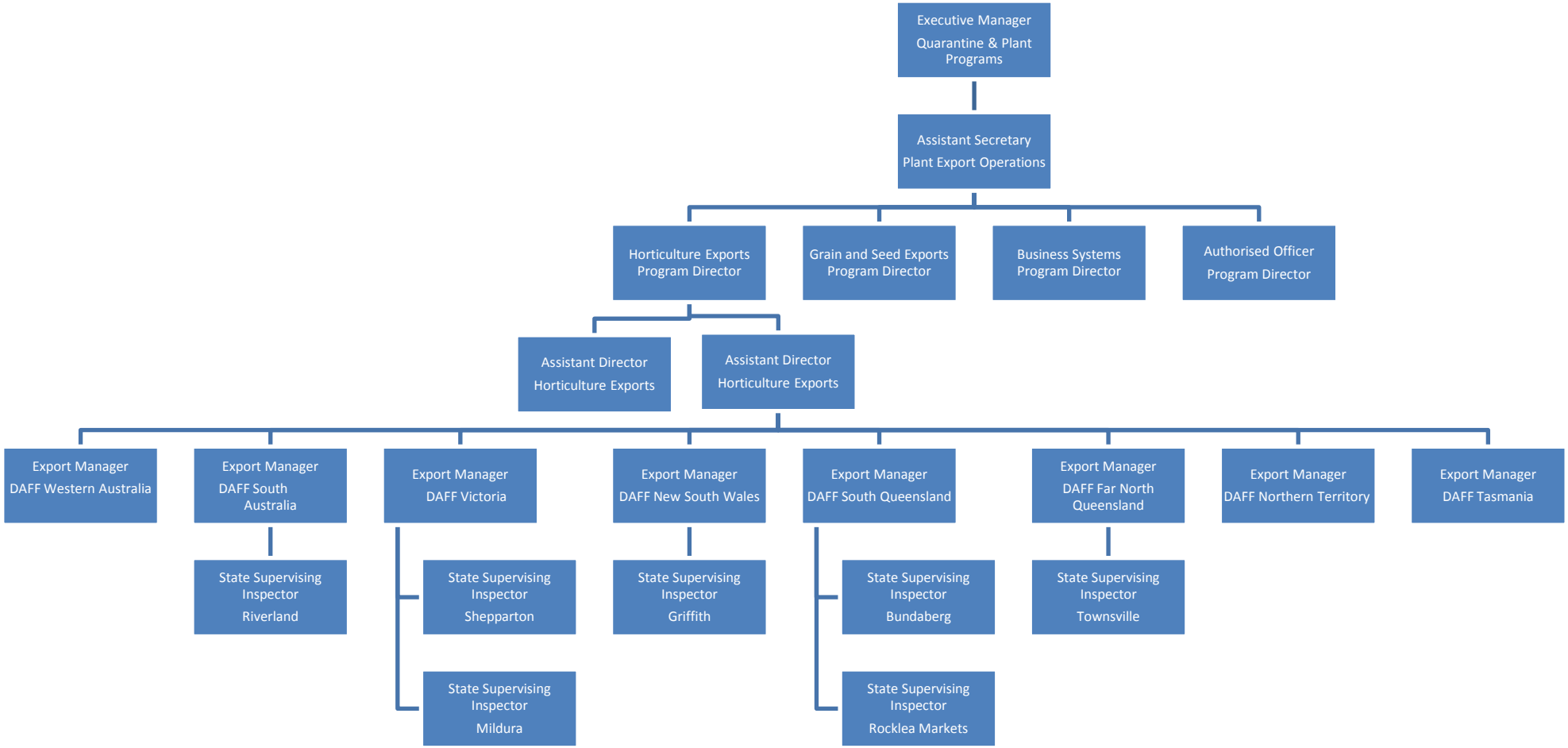
8.4.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom has been approved) must be performed as detailed in the Australian Code of Practice for the Management and Control of Fruit Flies.

The servicing and inspection frequency will be as directed in the Australian Code of Practice for the Management and Control of Fruit Flies.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

Attachment to Section 8.1 DAFF Plant Contact List



ATTACHMENT 1 NEW ZEALAND PEST LIST

AVOCADO
Persea americana

Avocadoes can be exported to New Zealand under Appendices 2 (Area Freedom) and 5 (cold storage disinfestation) to the NZ BQA.

Growers and packhouse must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be effected for the Risk Group 2 pests Cercospora Spot Blotch (CSB) and Sun Blotch Viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

- avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600-unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale

Diaspididae

Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Mite	
Arachnida	
Acarina	

Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	-

Non-regulated non plant pests/organisms

None

BANANA
Musa

Bananas can be exported to New Zealand under Appendix No. 6 – Non Host of the NZ BQA.

Growers and packhouses need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a regulated pest until official categorisation has been determined by DAFF/MPI.

***Maconellicoccus hirsutus* (pink hibiscus mealybug) is listed for bananas, and DAFF can certify freedom from this pest based on the following:**

Maconellicoccus hirsutus

1. In field controls for *Maconellicoccus hirsutus* species are a requirement of grower registration, as such pink hibiscus mealybug will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Maconellicoccus hirsutus* fruit will be fumigated with Methyl Bromide (at appropriate rates) prior to export.

3. Pre-export inspection of fruit will identify the presence of *M. hirsutus*, and the fruit would be rejected for export to New Zealand.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Cercospora hayi	diamond spot
Chaetothyrina musarum	sooty blotch
Cladosporium spp.	cladosporium mould
Glomerella cingulata var. *minor (*anamorph *Collectotrichum gloeosporioides* var. *minor)*	anthracnose
*Guignardia musae (*anamorph *Phyllosticta musarum)*	freckle
Phytophthora palmivora	black rot
Ramichloridium musae	freckle
Aleurodicus dispersus	spiralling whitefly
Amblypelta lutescens	fruit spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Araecerus coffeae	coffee bean weevil
Aspidiotus destructor	coconut scale
Atherigona orientalis	muscid fly
Bactrocera bryoniae	**fruit fly** #
Bactrocera musae	**banana fruit fly** #
Bactrocera cucumis	**cucumber fruit fly** #

Bactrocera frauenfeldi	**fruit fly #**
Bactrocera jarvisi	**jarvis' fruit fly #**
Bactrocera neohumeralis	**lesser Queensland fruit fly #**
Bactrocera tryoni	**Queensland fruit fly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Chaetanaphothrips signipennis	banana rust thrips
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Cnaphalocrocis medinalis	rice leaf folder
Dirioxa pornia	Island fruit fly
Dysmicoccus brevipes	pineapple mealybug
Elixothrips brevisetis	banana rind thrips
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Ferrisia virgata	striped mealybug
Geloptera miracula	chyrsomelid beetle
Haplothrips gowdeyi	black flower thrips
Helicoverpa assulta	cape gooseberry budworm
Hemiberlesia palmae	citrus black scale
Icerya aegyptiaca	Eygyptian fluted scale
Icerya seychellarum	Seychelles scale
Isotenes miserana	orange fruit borer
Leptoglossus gonagra	squash bug
Maconellicoccus hirsutus	**pink hibiscus mealybug #**
Melanitis leda ismene	Rice butterfly
Monolepta australis	red-shouldered leaf beetle
Opogona glycyphaga	sugar-cane bud moth
Orgyia australis	vapourer moth
Pentalonia nigronervosa	banana aphid
Pinnaspis strachani	hibiscus snow scale
Planococcus citri	citrus mealy bug
Planococcus minor	passionvine mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rhyparida discopunctulata	leaf beetle
Spodoptera exigua	beet armyworm
Thrips florum	flower thrips
Thrips hawaiiensis	banana flower thrips
Tiracola plagiata	banana fruit caterpillar
Tirathaba rufivena	fruit borer
Unaspis citri	citrus snow scale
Xenothictis sciaphila	tortricid
Brevipalpus lewisi	bunch mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	vegetable spider mite

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Erwinia carotovora	bacterial soft rot
Aspergillus flavus	aspergillus storage rot
Aspergillus niger	aspergillus rot
*Ceratocystis paradoxa (*anamorph *Thielaviopsis paradoxa)*	ceratocystis rot
Colletotrichum musae	anthracnose
Deightoniella torulosa	black tip
Fusarium pallidoroseum	fusarium rot
*Glomerella cingulata (*anamorph *Colletotrichum gloeosporioides)*	anthracnose
Lasiodiplodia theobromae	fruit and stem-end rot
*Magnaporthe grisea (*anamorph *Pyricularia grisea)*	Johnson's spot
Sclerotinia sclerotiorum	cottony rot
Agrotis ipsilon	greasy cutworm
Aonidiella aurantii	California red scale
Aphis gossypii	cotton aphid
Araecerus fasciculatus	coffee bean weevil
Aspidiotus nerii	oleander scale
Chrysodeixis eriosoma	green garden looper
Coccus hesperidum	brown soft scale
Hemiberlesia cyanophylli	cyanophyllum scale
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Hercinothrips bicinctus	banana silvering thrips
Hermetia illucens	black soldier fly
Listroderes difficilis	vegetable weevil
Pseudococcus longispinus	longtail mealybug
Rhopalosiphum maidis	corn leaf aphid
Spodoptera litura	cluster caterpillar
Brevipalpus californicus	bunch mite
Polyphagotarsonemus latus	broad mite
Tetranychus lambi	strawberry spider mite
Tetranychus urticae	twospotted spider mite

# Denotes high impact pest

CAPSICUM
Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendix 12 (irradiation) to the NZ BQA/IHS**

A number of Risk Group 2 pests are listed for capsicums, and DAFF can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during DAFF pre-export inspection.
5. Irradiation at 150Gy is determined to be effective for all fruit flies.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *B. musae* has never been detected on capsicum fruit during DAFF pre-export inspection.
4. Irradiation at 150Gy is determined to be effective for all fruit flies.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on capsicum fruit during DAFF pre-export inspection.

Conogethes punctiferalis

1. Irradiation at 250Gy is determined to be effective for *C. punctiferalis*.

Irradiation at 150Gy is permitted where effective in-field controls have been undertaken for *C. punctiferalis.* Methyl Bromide at appropriate rates (prior to export) is also an effective treatment for*Lepidopteran* spp.

Thrips palmi [vect]

1. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand, or treated with Methyl Bromide.

2. Historical records show that *T. palmi* has never been detected on capsicum fruit during DAFF pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
*Bactrocera kraussi**	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci [vect]	
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Cicadellidae	common brown leafhopper
Orosius argentatus [vect.]	common brown leafhopper
Orosius orientalis [vect.]	
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aleyrodidae	
Aleurodicus dispersus	spiralling whitefly
Trialeurodes vaporariorum [strain]	greenhouse whitefly
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Coccidae	
Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale
Diaspididae	
Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	
Frankliniella schultzei [vect.]	tomato thrips

Scirtothrips dorsalis [vect.]	chilli thrips

Mite
Arachnida
Acarina
Tetranychidae

Eutetranychus orientalis	pear leaf blister mite

Fungus
Ascomycota
Hypocreales
Hypocreaceae

Nectria haematococca var. *brevicona*	dry rot

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae

Alternaria alternata f. sp. *lycopersici*	
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot

Tuberculariales
Tuberculariaceae

Fusarium oxysporum f. sp. *vasinfectum*	fusarium wilt

Pythiales
Pythiaceae

Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak

Virus
-
-
-
capsicum chlorosis virus (CaCV)
potato spindle tuber viroid (PSTVd)
tobacco leaf curl bigeminivirus [VO]
tomato torrado virus (ToTV)
tomato yellow leaf curl virus (TYLCV)

Phytoplasmas
Tomato big bud phytoplasma (TBB)

Weed
Angiospermae
Asterales
Asteraceae

Baccharis halimifolia	baccharis

Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf
Xanthium spp. (except *X. spinosum*)	bur
Caryophyllales	
Amaranthaceae	
Amaranthus spp.	amaranthus
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x *almum*	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*)	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes costirostris	vegetable weevil
Listroderes difficilis	vegetable weevil
Listroderes obliquus	vegetable weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	

Bemisia argentifolii	poinsettia whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Myzus persicae	green peach aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Pyralidae	
Sceliodes cordalis	poroporo fruit borer
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Aculops lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli*)	phomopsis stem rot
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	

Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	cottony rot
Sclerotinia sclerotiorum	
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phoma destructiva	bulb rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	

Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. *parasitica*	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew
Bacterium	
-	
-	
Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	
A*grobacterium tumefaciens*	crown gall
Virus	
-	
-	
-	
Tobacco ringspot nepovirus (TRSV)	-
Tomato spotted wilt virus (TSWV)	-
Weed	
Angiospermae	
Asterales	
Asteraceae	
Galinsoga parviflora	
Sonchus spp.	sowthistle
Poales	

Poaceae

Echinochloa spp.	grasses
Eleusine indica	goose grass
Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis, *C. reticulata*, *C. maxima*, *C. paradisi*, *C. limon* and *C. aurantiifolia*

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The pest Citrus leaf miner, whilst listed as a Risk Group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis' fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	-

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug

Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth

Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders' case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth

Thysanoptera
Thripidae

Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida
Acarina
Eriophyidae

Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tenuipalpidae

Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite

Tetranychidae

Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non-plant pests/organisms

None

CUCUMBER
Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for cucumbers. DAFF can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on cucumber fruit during DAFF pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. Pre-export inspections of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
2. Historical records show that *T. palmi* has never been detected on cucumber fruit during DAFF pre-export inspection.

Note: item 1 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the NZ BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during DAFF pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	-
Curculionidae	

Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	
Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida
Acarina

Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cladosporium cucumerinum	--
Moniliaceae	
Verticillium albo-atrum [severe strain]	progressive wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Virus

-	
-	
-	
	-
	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes difficilis	Vegetable weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper

Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar

Thysanoptera
Thripidae

Frankliniella occidentalis	western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips tabaci	onion thrips

Mite

Arachnida
Acarina
Acaridae

Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite

Eupodidae

Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite

Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tetranychidae

Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Pleosporaceae

Pleospora tarda	black mould
(anamorph *Stemphylium botryosum*)	

Unknown Dothideales

Didymella bryoniae	cucumber stem rot
(anamorph *Phoma cucurbitacearum*)	

Erysiphales
Erysiphaceae

Erysiphe cichoracearum	powdery mildew

(anamorph *Oidium asteris-punicei*)
Hypocreales
Hypocreaceae

Gibberella acuminata	fusarium storage rot
(anamorph *Fusarium acuminatum*)	
Gibberella fujikuroi	fusarium rot
(anamorph *Fusarium fujikuroi*)	
Gibberella gordonia	mould
(anamorph *Fusarium heterosporum*)	
Gibberella intricans	root and stem dry rot
(anamorph *Fusarium equiseti*)	

Gibberella zeae (anamorph *Fusarium graminearum*)	mould
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	--
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	--
Septoria cucurbitacearum	--
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	--
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot

Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	-
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	--
Pythium ultimum	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Enterobacteriaceae	
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Viruses

Tobacco ringspot nepovirus (TRSV)
Tomato spotted wilt virus (TSWV)

Non-regulated non plant pests

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of Sulphur Dioxide and Carbon Dioxide fumigation for Redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Growers and packhouse must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk Group 2 pests *Conogethes punctiferalis*. DAFF will be certifying Southern State grapes area free for the Risk Group 2 pest *Maconellicoccus hirsutus*.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name
Insect	

Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug

Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except *E. postvittana*)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips
Mite	
Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite
Mollusc	
Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail
Fungus	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	-
Coniella diplodiella	white rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria vitis	leaf disease

Cladosporium viticola	cladosporium leaf spot

Weed
Angiospermae
Asterales
Asteraceae

Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except *X. spinosum*) [contaminant]	bur

Geraniales
Zygophyllaceae

Tribulus terrestris [contaminant]	caltrop

Poales
Poaceae

Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass

Solanales
Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae

Latrodectus hasselti	Australian red-back spider

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect	
Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite
Arachnida
Acarina
Tarsonemidae

Polyphagotarsonemus latus	broad mite

Tenuipalpidae

Brevipalpus californicus	bunch mite

Tetranychidae

Panonychus ulmi	European red mite
Tetranychus urticae	twospotted spider mite

Mollusc
Gastropoda
Stylommatophora
Helicidae

Helix aspersa	common garden snail

Fungus
Ascomycota
Diatrypales
Diatrypaceae

Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback

Dothideales
Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker

Elsinoaceae

Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose

Mycosphaerellaceae

Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot

Erysiphales
Erysiphaceae

Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew

Leotiales
Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot

Phyllachorales
Phyllachoraceae

Glomerella cingulata (anamorph	bitter rot

Colletotrichum gloeosporioides)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot
Weed	
Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	-
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	-
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	-
Digitaria violascens [contaminant]	-
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass
Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	-
Pennisetum macrourum [contaminant]	African feather grass
Solanales	
Solanaceae	
Lycium barbarum [contaminant]	boxthorn

Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

LYCHEE
Litchi chinensis

Lychees can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Additional Declaration

Option1 *EXDOC Endorsement No 2298*

1) The Lychees in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MPI and DAFF.

Regulated Pest List Commodity Sub-class: Fresh Fruit/Vegetables *Litchi chinensis* from Australia

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Amblypelta lutescens	Banana spotting scale
Amblypelta nitida	Fruit spotting scale
Bactrocera jarvisi	Jarvis fruit fly
Bactrocera neohumeralis	Lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceroplastes rubens	Pink/red wax scale
Cryptophlebia ombrodelta	Seychelles scale
Ischnaspis longirostris	Black thread scale
Nysius vinitor	Rutherglen bug
Bipolaris hawaiiensis	Fungi
Pestalotiopsis sp.	Fungi

MANGO
Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Bactrocera cucumis	cucumber Fruit Fly
Bactrocera frauenfeldi	fruit Fly
Bactrocera jarvisi	jarvis' fruit fly
Bactrocera musae	banana fruit Fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera opiliae	false Oriental Fruit Fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly
Dirioxa pornia	Island Fruit Fly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	yellow peach moth
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Frankliniella schultzei	flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Helopeltis clavifer	
Icerya aegyptiaca	Egyptian fluted scale
Idioscopus clypealis	mango hopper
Idioscopus nitidulus	mango hopper
Ischnaspis longirostris	black thread scale
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Monolepta australis	red-shouldered leaf beetle

Monolepta divisa	small monolepta beetle
Nipaecoccus vastator	karoo thorn mealybug
Ophiusa tirhaca	
Penicillaria jocosatrix	mango tipborer
Phenacaspis dilatata	mango scale
Planococcus citri	Citrus mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rastrococcus sp.	
Rhyparida limbatipennis	
Saissetia miranda	Mexican black scale
Selenothrips rubrocinctus	redbanded thrips
Sternochetus mangiferae	mango seed weevil
Asterina punctiformis	
Chaetothyrina tenuissima	stem sooty blotch
Cytosphaera mangiferae	stem-end rot
Elsinoe mangiferae	mango scab
(anamorph Sphaceloma mangiferae)	
Fusicoccum mangiferae	
Nattrassia mangiferae	stem-end rot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangifolia	storage rot
Pestalotiopsis theae	mango blight
Pestalotiopsis virgatula	mango leaf spot
Phomopsis mangiferae	stem end rot
Pythium mangifera	mango powdery mildew
(anamorph Oidium mangiferae)	
Schizoparme straminea	schizoparme fruit rot
(anamorph Coniella	

Non-regulated pests

Pest Scientific Name	**Common Name**
Aonidiella aurantii	California red scale
Ceroplastes destructor	white wax scale
Epiphyas postvittana	light brown apple moth
Helicoverpa armigera	tomato fruitworm
Heliothrips haemorrhoidalis	greenhouse thrips
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Icerya purchasi	cottony cushion scale
Parasaissetia nigra	nigra scale
Pseudococcus longispinus	long tailed mealybug
Saissetia coffeae	helmet scale
Toxoptera aurantii	black citrus aphid
Toxoptera citricida	brown citrus aphid
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite

Alternaria alternata	black stalk rot
Botryosphaeria dothidea (*anamorph Fusicoccum aesculi)*	canker
Botryosphaeria parva (*anamorph Fusicoccum parvum)*	canker
Botryosphaeria rhodina	gummosis
Botryosphaeria ribis (*anamorph Lasiodiplodia theobromae)*	canker
Botryotinia fuckeliana (*anamorph Botrytis cinerea)*	grey mould
Cladosporium cladosporioides	cladosporium leaf spot
Cochliobolus hawaiiensis	leaf spot, seed rot
Colletotrichum acutatum	anthracnose
Colletotrichum coccodes	anthracnose
Dipodascus Geotrichum (*anamorph Geotrichum candidum)*	sour rot
Dothiorella aromatica	stem-end rot
Epicoccum purpurascens	black mould
Erysiphe cichoracearum (*anamorph Oidium asterispunicei)*	powdery mildew
Fusicoccum luteum	bunch rot
Glomerella cingulata (*anamorph Colletotrichum gloeosporioides)*	anthracnose
Glomerella lagenaria (*anamorph Colletotrichum orbiculare)*	
Pestalotiopsis funereal	leaf spot
Pestalotiopsis versicolor	pestalotiopsis rot
Phytophthora nicotianae	buckeye rot
Pithomyces chartarum	facial eczema fungus
Pleospora allii (*anamorph Stemphylium vesicarium)*	black mould
Rhizopus stolonifer	rhizopus soft rot
Thanatephorus cucumeris (*anamorph Rhizoctonia solani)*	rhizoctonia rot

MELON
Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. DAFF can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during DAFF pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during DAFF pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 2 and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during DAFF pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

REGULATED PESTS (actionable)

Pest Scientific Name	Common Name

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Insect
Insecta
Diptera
Tephritidae

Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect
Insecta
Homoptera
Aleyrodidae

Bemisia tabaci	sweet potato whitefly

Thysanoptera
Thripidae

Thrips palmi	palm thrips

Mite

Arachnida
Acarina
Tetranychidae

Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Curculionidae	
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	-
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Myzus persicae [vect.]	green peach aphid
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm

Proxenus tenuis	-
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	--
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	--
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	-
Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	-
Fusarium oxysporum f. sp. *melonis*	--
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak

Zygomycota: Zygomycetes

Mucorales
Choanephoraceae
Choanephora cucurbitarum blight

Bacterium

-
-
Pseudomonadaceae
Acidovorax avenae subsp. *citrulli* bacterial rot

Virus

-
-
-
-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	whitefringed weevil
Listroderes difficilis	vegetable weevil
Coccinellidae	
Epilachna vigintioctopunctata	28 spotted ladybird
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot

Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia latens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana	black leaf spot

(anamorph *Cladosporium herbarum*)	
Unknown Dothideales	
Didymella bryoniae	cucumber stem rot
(anamorph *Phoma cucurbitacearum*)	
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum	powdery mildew
(anamorph *Oidium asteris-punicei*)	
Hypocreales	
Hypocreaceae	
Gibberella acuminata	fusarium storage rot
(anamorph *Fusarium acuminatum*)	
Gibberella avenacea	fusarium stem canker
(anamorph *Fusarium avenaceum*)	
Gibberella baccata	fusarium rot
(anamorph *Fusarium lateritium*)	
Gibberella intricans	root and stem dry rot
(anamorph *Fusarium equiseti*)	
Nectria haematococca	fusarium fruit rot
(anamorph *Fusarium solani*)	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	grey mould
(anamorph *Botrytis cinerea*)	
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria	--
(anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	sour rot
(anamorph *Geotrichum candidum*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	rhizoctonia rot
(anamorph *Rhizoctonia solani*)	
Stereales	
Atheliaceae	
Athelia rolfsii	Rolf's disease
(anamorph *Sclerotium rolfsii*)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	--

Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	--
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	--
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. *intermedium*	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot
Bacterium	
-	
-	
Pseudomonadaceae	
Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot
Virus	
tobacco ringspot nepovirus [TRSV]	

Non-regulated non plant pests

None

PAPAYA
Papaya

Papaya can be exported to New Zealand under Appendix No. 12 - Irradiation of the NZ BQA.

Growers and packhouse choosing 250 Gray (Gy) irradiation for papaya do not need to be specifically registered for the New Zealand export program.

Growers and packhouse choosing 150 Gy irradiation and in-field controls for papaya need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

***Conogethes punctiferalis* (yellow peach moth) is listed for papaya, and DAFF can certify freedom from this pest based on the following:**

Conogethes punctiferalis

1. If infield controls for *Conogethes punctiferalis* are carried out, fruit will be irradiated at 150Gy prior to export.

1. Where irradiation is chosen as the pest control activity for *Conogethes punctiferalis* a minimum dose of 250Gy must be applied prior to export. This treatment will be considered to be a generic treatment for all regulated arthropod pests listed below.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Asperisporium caricae	black spot
Phomopsis caricae-papayae	wet fruit rot
Phytopthora capsici	buckeye rot
Phytopthora palmivora	black rot
Bactrocera cucumis	**cucumber fruit fly** #
Bactrocera frauenfeldi	**fruit Fly** #
Bactrocera jarvisi	**jarvis' fruit fly** #
Bactrocera musae	**banana fruit fly** #
Bactrocera neohumeralis	**lesser Queensland fruit fly** #
Bactrocera tryoni	**Queensland fruit fly** #
Ceratitis capitata	**Mediterranean fruit fly** #
Dirioxa pornia	Island Fruit Fly
Aleurodicus dispersus	spiraling whitefly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Carpophillis maculatus	dried fruit beetle

Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	**yellow peach moth** #
Eucalymnatus tessellatus	tessellated scale
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Ferrisia virgata	striped mealybug
Pericyma cruegeri	poinciana looper
Pseudaulacaspis cockerelli	Cockerell's scale
Papaya ringspot virus (type P strain)	PRSV-Type P

Non-regulated pests

Pest Scientific Name	**Common Name**
Brevipalpus phoenicis	passion vine mite
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria rhodina (anamorph Lasiodiplodia theobromae)	*g*ummosis
Botryosphaeria ribis	canker
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum dematium	anthracnose
Corynespora cassicola	leaf spot
Erysiphe cruciferarum	powdery mildew
Fusarium pallidoroseum	fruit core rot
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	anthracnose
Leveillula taurica	powdery mildew
Mycosphaerella caricae (anamorph Phoma caricae-papayae)	leaf spot
Phytophthora nicotianae	buckeye rot
Rhizopus stolonifer	rhizopus soft rot
Aphis spiraecola	spirae aphid

Denotes high impact pest

PINEAPPLE
Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale

Pseudococcidae
Dysmicoccus brevipes pineapple mealybug
Isoptera
Rhinotermitidae
Rhinotermes intermedius termite
Lepidoptera
Tineidae
Opogona glycyphaga sugarcane bud moth

Mite

Arachnida
Acarina
Acaridae
Tyrophagus sp. mould mite
Histiomidae
Histiostoma sp. mite
Tarsonemidae
Tarsonemus ananas pineapple mite
Tenuipalpidae
Dolichotetranychus floridanus pineapple false spider mite

Nematode

Secernentea
Tylenchida
Hoplolaimidae
Rotylenchus reniformis
Pratylenchidae
Pratylenchus brachyurus root lesion nematode

Symphylid

Symphyla
Unknown Symphyla
Symphylidae
Hanseniella sp. symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetes
Dematiaceae
Thielaviopsis paradoxa
Moniliaceae
Penicillium funiculosum

Bacterium
-
-
Enterobacteriaceae
Erwinia ananas marbling of fruit

Virus

-
-
-
mealybug wilt closterovirus -

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect

Insecta
Hymenoptera
Formicidae
Iridomyrmex glaber black house ant
Paratrechina vaga ant
Tapinoma sp. ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin's flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	
Thripidae	
Thrips tabaci	onion thirps

Mite

Arachnida
Acarina
Acaridae

Rhizoglyphus sp.	acarid mite

Nematode
Secernentea
Tylenchida
Meloidogynidae

Meloidogyne javanica	Javanese root knot nematode

Fungus
Ascomycota
Hypocreales
Hypocreaceae

Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot

Oomycota
Pythiales
Pythiaceae

Phytophthora cinnamomi	-
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus
-
-
-

tomato spotted wilt tospovirus (TSWV)	-

Non-regulated non plant pests/organisms

Pest Scientific Name	Common Name

Insecta
Hymenoptera
Formicidae

Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

PUMPKIN
Cucurbitae pepo

Pumpkins (*C. pepo*) can be exported to New Zealand under the following appendicies.

- **Appendix 2 – (fruit fly Area Freedom)**

A number of Risk Group 2 pests have been listed for pumpkins (*C. pepo*). DAFF can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on pumpkin fruit during DAFF pre-export inspection.

Tetranychus kanzawai

1. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
2. Historical records show that *T. kanzawai* has never been detected on pumpkin fruit during DAFF pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Bemisia tabaci	sweet potato whitefly
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper

Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite
Tomato big bud phytoplasma	

Non-regulated pests

Pest Scientific Name	Common Name
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Epilachna vigintioctopunctata	28-spot ladybird
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	whitefringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Thrips tabaci	onion thrips
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph	cucumber stem rot
Phoma cucurbitacearum)	
*Dipodascus geotrichum (*anamorph	sour rot
Geotrichum candidum)	
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
*Erysiphe cichoracearum (*anamorph	powdery mildew
Oidium asteris-punicei)	
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	

*Gibberella acuminata (*anamorph *Fusarium acuminatum)*	fusarium storage rot
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker
*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani)*	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

Tobacco ringspot nepovirus (TRSV)

STRAWBERRY
Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil
Scarabaeidae	

Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil
Listroderes difficilis	vegetable weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil

Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Myriapod

Diplopode	
Julida	
Blaniulidae	
Blaniulua guttulatus	spotted snake millipede

Mollusc

Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Limacidae	
Deroceras panormitanum	brown field slug
Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO
Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendix 12 (irradiation) to the NZ BQA/IHS**

A number of Risk Group 2 pests have been listed for tomatoes. DAFF can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on tomato fruit during DAFF pre-export inspection.

Thrips palmi

1. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand, or treated with Methyl Bromide .
2. Historical records show that *T. palmi* has never been detected on tomato fruit during DAFF pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on tomato fruit during DAFF pre-export inspection.
5. Irradiation at 150Gy is deemed effective against all fruit flies.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name **Common Name**

Insect

Insecta
Diptera
Tephritidae

Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect

Insecta
Diptera
Tephritidae

Bactrocera musae	banana fruit fly

Homoptera
Aleyrodidae

Bemisia tabaci [vect.]	sweet potato whitefly

Thysanoptera
Thripidae

Thrips palmi [vect.]	palm thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta

Tenebrionidae

Gonocephalum carpentariae	false wireworm

Diptera
Lonchaeidae

Lamprolonchaea brouniana	metallic-green tomato fly

Muscidae

Atherigona orientalis	muscid fly

Tephritidae

Dirioxa pornia	island fruit fly

Hemiptera
Aleyrodidae

Trialeurodes vaporariorum [vect.]	greenhouse whitefly

Cicadellidae

Orosius argentatus [vect.]	common brown leafhopper
Orosius orientalis [vect.]	common brown leafhopper

Coreidae	
Fabrictilis australis	squash bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm
Thysanoptera	
Thripidae	
Frankliniella schultzei [vect.]	tomato thrips
Scirtothrips dorsalis [vect.]	chilli thrips

Fungus

Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak

Virus

-	
-	
-	
capsicum chlorosis virus (CaCV)	-
potato spindle tuber viroid (PSTVd)	
tomato torrado virus (ToTV)	
tomato yellow leafcurl virus (TYLCV)	

Phytoplasma

-	
-	

-	
tomato big bud phytoplasma (TBB)	-

Regulated non-quarantine pests

None

Regulated non plant pests

None

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Listroderes difficilis	vegetable weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Thrips tabaci	onion thrips
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii	Rolf's disease

(anamorph *Sclerotium rolfsii*)

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae

Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae

Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot

Moniliaceae

Verticillium dahliae	verticillium wilt

Tuberculariales
Tuberculariaceae

Fusarium oxysporum	leaf spot

Unknown Hyphomycetes
Unknown Hyphomycetes

Trichothecium roseum	pink rot

Zygomycota: Zygomycetes
Mucorales
Mucoraceae

Rhizopus stolonifer	rhizopus soft rot

Virus

Tobacco ringspot nepovirus (TRSV)
Tomato spotted wilt virus (TSWV)

Non-regulated non plant pests

None

WATERMELON
Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk Group 2 pests have been listed for watermelons. DAFF can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during DAFF pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during DAFF pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the NZ BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai.*
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during DAFF pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

REGULATED PESTS (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	palm thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle

Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	-
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite

Tetranychidae

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Ascochyta spp.	-
Phomopsis cucurbitae	--

Oomycota

Pythiales

Pythiaceae

Pythium spp.	pythium rot

Bacterium

-

-

Enterobacteriaceae

Erwinia tracheiphila	bacterial wilt

Pseudomonadaceae

Acidovorax avenae subsp. *citrulli*	bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta

Hymenoptera

Formicidae

Solenopsis geminata	fire ant

NON-REGULATED PESTS (non-actionable)

Non-regulated non-quarantine pests

Insect

Insecta

Coleoptera

Curculionidae

Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil

Collembola

Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite

Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota
Dothideales
Pleosporaceae
Leptosphaerulina trifolii — seed rot
Unknown Dothideales
Didymella bryoniae — cucumber stem rot
(anamorph *Phoma cucurbitacearum*)
Erysiphales
Erysiphaceae
Erysiphe cichoracearum — powdery mildew
(anamorph *Oidium asteris-punicei*)
Hypocreales
Hypocreaceae
Nectria haematococca — fusarium fruit rot
(anamorph *Fusarium solani*)
Leotiales
Sclerotiniaceae
Botryotinia fuckeliana — grey mould
(anamorph *Botrytis cinerea*)
Sclerotinia sclerotiorum — cottony rot
Phyllachorales
Phyllachoraceae
Glomerella cingulata — bitter rot
(anamorph *Colletotrichum gloeosporioides*)
Glomerella lagenaria — --
(anamorph *Colletotrichum orbiculare*)
Basidiomycota: Basidiomycetes
Ceratobasidiales
Ceratobasidiaceae
Thanatephorus cucumeris — rhizoctonia rot
(anamorph *Rhizoctonia solani*)
Stereales
Atheliaceae
Athelia rolfsii — Rolf's disease
(anamorph *Sclerotium rolfsii*)

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales

Sphaerioidaceae
Phoma exigua — phoma rot
Septoria cucurbitacearum — --

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Alternaria cucumerina — --
Moniliaceae

Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	--
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	--
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot

Oomycota

Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew

Bacterium

-	
-	
Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI
Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for zucchinis and scallopinis. DAFF can certify freedom from these pests based on the following:

Bemisia tabaci

5. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
6. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
7. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
8. Historical records show that *B. tabaci* has never been detected on zucchini fruit during DAFF pre-export inspection.

Note: item 3 above does not apply to zucchini and scallopini fruit exported to New Zealand under appendix 2 (fruit fly area freedom) and 11(winter window) to the NZ BQA. It is felt however, that items 1, 2, 4 and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

3. Dimethoate is registered for in-field use against *Tetranychus* spp. Zucchinis exported to New Zealand under appendix 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
4. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *T. kanzawai* has never been detected on zucchini fruit during DAFF pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by DAFF/MPI.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale

Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Bactrocera cucumis	**cucumber fruit fly #**
Bemisia tabaci	**sweet potato whitefly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips palmi	melon thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite
Tetranychus kanzawai	**kanzawa mite #**
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite
Tomato big bud phytoplasma	

Non-regulated pests

Pest Scientific Name	Common Name
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Epilachna vigintioctopunctata	28-spot ladybird
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	whitefringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Thrips tabaci	onion thrips
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph *Phoma cucurbitacearum)*	cucumber stem rot
*Dipodascus geotrichum (*anamorph *Geotrichum candidum)*	sour rot
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
*Erysiphe cichoracearum (*anamorph *Oidium asteris-punicei)*	powdery mildew
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	

Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	
*Gibberella acuminata (*anamorph *Fusarium acuminatum)*	fusarium storage rot
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker
*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani)*	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

Tobacco ringspot nepovirus (TRSV)

 # Denotes high impact pest

ATTACHMENT 2 FORMS

2.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional DAFF office**			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
EMAIL ADDRESS			
POSTAL OR BUSINESS ADDRESS			
	POST CODE		
PROPERTY ADDRESS			
	POST CODE		
REAL PROPERTY DESCRIPTION (of area under planting – please attach detailed maps)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Primary Industry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

I have read the Systems Operation Manual and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	
Pumpkin			
Strawberries	Rockmelon	Honeydew melon	Cucumber
Scaloppini			

DAFF Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.2 APPLICATION FOR REGISTRATION OF: PACKHOUSE / FREIGHT FORWARDER / LOAD OUT FACILITY / EXPORT INSPECTOR (DELEGATE)

Please post or fax this form to your local regional DAFF office		
NAME		
DAFF EXPORT ESTABLISHMENT NUMBER (if applicable)		
EMAIL ADDRESS		
POSTAL ADDRESS		
	POST CODE	
PREMISES ADDRESS		
	POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a (circle as appropriate) packer / freight forwarder / load out facility / delegated export inspector for (commodities)…….. for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry of Agriculture and Forestry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry.

The following persons are hereby nominated as those responsible for upholding requirements within the SOM.

Name	**Responsibility** (circle as appropriate)
……	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……	Product Integrity / Load Out / Export Inspection

I have read the Systems Operation Manual as amended and agree to be bound by the conditions and restrictions contained therein as they apply to packhouses / freight forwarders / load out facilities / delegated export inspectors. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

DAFF Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION

APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW **Please post or fax this form to your local regional DAFF office**			
NAME OF TREATMENT CENTRE			
DAFF EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
		POST CODE	
PREMISES ADDRESS			
		POST CODE	
DECLARATION I/We, ... hereby apply for registration as a treatment centre as required under the Bilateral Quarantine Arrangement made between the Ministry of Primary Industry, New Zealand and the Australian Government Department of Agriculture Fisheries & Forestry. I have read the Systems Operation Manual and agree to be bound by the conditions and restrictions contained therein as they apply to treatment centres. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.			
SIGNATURE		**DATE**	
WITNESS		**DATE**	
Treatment Type (please specify)			
Methyl Bromide Fumigation Cold Storage	Dimethoate Irradiation		

DAFF Inspector: …….

Signature: ……

Regional Office: …….

Date: …….

Authorised stamp

2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES

AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the NZ BQA to perform field monitoring advisory services to growers registered by DAFF for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the NZ BQA Systems Operation Manual as amended and have the ability to recognise and identify the regulated pest and weed seeds of concern to New Zealand.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to NZ BQA registered growers available to DAFF/MPI for auditing purposes.

I/We agree to notify DAFF immediately should any NZ BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the NZ BQA and the instructions contained in the Systems Operation Manual for NZ BQA.

Signature .....

Printed Name ..... Date .....

DAFF Inspector: …….

Signature: ……

Regional Office: …….

Date: …….

Authorised stamp

2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

Page 1 of 2

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Australian - New Zealand Bilateral Quarantine Arrangement and the NZ BQA Systems Operation Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, DAFF must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the NZ BQA and the Systems Operation Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for NZ BQA commodities will provide properly identified inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection

The following parties and persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	Company	Commodity	Address
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Page 2 of 2

Treatment Supervision Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the NZ BQA for and on behalf of this Company.

Company	Commodity	Address
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Loading Supervisory Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of NZ BQA commodities as is required by the NZ BQA and the contents of this Manual.

Company	Commodity	Address
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the NZ BQA and the Systems Operation Manual as amended required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

DAFF Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.6 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Tick

Date	Trade Description .....
Commodity	Commodity .....
No of Cartons	Registered Grower No. .....
Registered Grower No.	Registered Packing Establishment .....
	.....
Ex 28/RFP Number/s:	Australian Origin .....
.....	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250
Exporter/s	(Tick one) .....
	Exporter Inspection completed by:.....
	(a) Exporter
Inspector Name	(b) ED (name)
(Block Letters)	**Inspected by**:
.....	Grower Line .....
Inspector's Signature	Consignment Line .....

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NR**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed ☐ **Failed** ☐ **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Regulated Pest
****Please note, this is a template only: packhouse/ exporters are permitted to formulate their own copies of this template, provided all of the above information is contained. This form will be checked and approved at audit**

2.7 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	**Number of Cartons/Commodity**	**Temperatures Taken ***

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Department of Agriculture, Fisheries and Forestryand the New Zealand Ministry of Primary Industry concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX 186 (i.e. transfer certificate) prior to shipment.

2.8 COLD DISINFESTATION RECORD

ON SHORE COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKHOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1^0C +/- 0 $.6^0C$.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

2.9 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by DAFF inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand should I/we wish to re-enter the Arrangement protocol at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in block letters Signature Date

....

Voluntary Withdrawal

I/we agree my/our property is no longer required to be registered under the terms and conditions required for the New Zealand export trade for NZ BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand should I/we wish to re-enter the Arrangement at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in Block letters Signature Date

....

DAFF OFFICE DOCUMENTATION
Fax / e-mail to State Office
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office)

Authorised person or
Inspector's Signature

.....

2.10 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection/audit of the following property/premises:- (Grower – Packer – ED – Treatment Centre – Exporter – Freight Forwarder – Other ……) (select appropriate title)

Name .....
Address .....
.....
.....
Reg No .....

I believe for the following reasons that the entity outlined above no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) they (please indicate):

have no intention to correct the above mentioned deficiency in the immediate future

OR

are suspended until corrective action has been implemented and successful re-audit has been undertaken

I hereby declare the entity outlined above is suspended from Appendix …….. (all, 4, 10 etc) of the Australia - New Zealand NZ BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Representative Name	Representative Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

2.11 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY THE TRANSFER OF DIMETHOATE TREATED COMMODITIES

I, ...of .....……

.....……...

hereby declare that the ..... cartons of

……..tomatoes/capsicums/cucumbers/rockmelons/hodewdew melons/scallopinis (circle as

applicable) consigned to..... .....……...on

..... (date) were harvested from the following registered

blocks……..

…… AND

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute (tomatoes only).

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

3. further declare ..... (insert name of supervisor) a designated person nominated by..... (insert name of exporter) has supervised the loading of this consignment for transport to .....….....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....20.....

Signature ..... Witness .....

2.12 CONTAINER REPORT SHEET

CONDITION/ HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No.....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28/RFP Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

2.13 AVOCADO GROWER DECLARATION

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

2.14 CUCURBIT GROWER DECLARATION

CUCURBIT GROWER DECLARATION
For those cucurbit/treatment combinations requiring in-field controls

Grower name and address:	**Cucurbit type** (please tick ✓)	**Treatment** (please tick ✓)
	Cucumber ☐ Honeydew melon ☐ Watermelon ☐ Zucchini ☐	Appendix 3 & 10 ☐ (methyl bromide) Appendix 10 & 11 ☐ (winter window)
Grower number:	**Declaration**	
Consignee name and address:	I,……hereby declare the produce described on this declaration was grown and produced in accordance with the conditions contained in the Australia-New Zealand Bilateral Quarantine Arrangement Systems Operation Manual.	
	……. Signature ……/……/…… Date	

Production block number	**Package type (carton, bin etc)**	**Number of packages**	**Total mass**

2.15 COLD TREATMENT RECORD OF CALIBRATION

CERTIFICATE OF LOADING AND CALIBRATION FOR COLD TREATMENT IN SELF REFRIGERATED CONTAINERS

Exporter:

Phytosanitary Number:

Container Number:

Container Seal Number:

Recorder Serial Number

Container Clock set to GMT:

Date Calibrated:

1. Calibration Results (at 0 ˚C):

Sensor Identification	First Reading	Second Reading	Correction Factor
1	……..	……	……..
2.	…… ……..	……	…… ……..
3.	……..	……	……..

2. Sensor Placement & Pulp Temperatures

Sensor Placement	Pulp Temperature ˚C
1	
2	
3	

3. Container Sealed:

Local Time: Date:

DAFF Inspector: …….……

Signature: ……..

Authorised stamp

Calibration Form Multi.

Australia – New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual 6E

This Systems Operation Manual incorporates the New Zealand Import Health Standards for Australian fruit fly host material and the Department of Agriculture's operational requirements.

This manual is maintained and controlled by the Department of Agriculture Biosecurity Plant Division in Canberra.

TABLE OF CONTENTS

AMENDMENT RECORD 6
GLOSSARY OF TERMS 7
DEFINITIONS 8
INTRODUCTION 9
SECTION 1 PEST CATEGORIES 10
1.1 Pest categories 10
1.1.1 Risk group 3 (RG3) pests 10
1.1.2 Risk group 2 (RG2) Pests 10
1.1.3 Risk group 1 (RG1) pests 10
1.1.4 Non regulated pests 11
1.1.5 Regulated pests 11
1.2 Maximum pest levels 11
1.3 Contaminants 11
SECTION 2 TREATMENT APPENDICES 13
2.1 Summary 13
2.2 Appendix 1 – Country freedom from fruit fly 26
2.3 Appendix 2 – Area freedom districts within Australia 26
2.3.1 General requirements 26
2.3.2 Approved area freedom districts 27
2.4 Appendix 3 – Fumigation 28
2.5 Appendix 4 – Dimethoate 29
2.6 Appendix 5 – Cold treatment 29
2.7 Appendix 6 – Non host 29
2.8 Appendix 7 – Heat treatments 29
2.9 Appendix 8 – Not currently in use 29
2.10 Appendix 9 – Not currently in use 29
2.11 Appendix 10 – Field control programs 29
2.12 Appendix 11 – Winter window 30
2.13 Appendix 12 – Irradiation 30
SECTION 3 GROWER RESPONSIBILITIES 32
3.1 Summary 32
3.2 General requirements 33
3.3 Registration 33
3.4 Orchard responsibilities 34
3.4.1 Citrus growers 34
3.4.2 Avocado growers 34
3.5 Audits 35
3.5.1 Non Compliance 36
3.5.2 Packhouse Approved Arrangement systems 36
3.5.3 Security and supervision 36
SECTION 4 CROP MONITOR RESPONSIBILITIES 37
4.1 Registration 37
4.2 Audit 37
4.3 Non compliance 37
SECTION 5 PACKHOUSE RESPONSIBILITIES 38
5.1 General requirements 38
5.2 Documentation 38

5.3 Delegation of exporter responsibilities 38
5.3.1 General 38
5.3.2 Security and supervision 39
5.3.3 Inspection 39
5.4 Audit 39
5.4.1 Non compliance 40
5.5 Approved Arrangements – Packhouse 40
5.5.1 General requirements 40
5.5.2 Audit 41
5.5.3 Inspection requirements 41
5.5.4 Documentation 42
5.5.5 Post treatment security 43
SECTION 6 TREATMENT CENTRE RESPONSIBILITIES 44
6.1 General requirements 44
6.2 Registration 44
6.3 Audit 44
6.3.1 Non compliance 44
6.4 Post treatment security 44
6.4.1 Registration 44
6.4.2 General requirements 45
6.5 Post treatment transportation 45
6.6 Treatment Appendices 46
6.6.1 Appendix 3 – Fumigation 46
6.6.1.2 Department of Agriculture supervision 47
6.6.2 Appendix 4 – Dimethoate 48
6.6.2.1 General requirements 48
6.6.2.2 Waxed produce 49
6.6.2.3 Sampling 49
6.6.2.4 Department of Agriculture audit 49
6.6.3 Appendix 5 – Cold treatment 50
6.6.3.1 General requirements 50
6.6.3.2 Temperature recorders 51
6.6.3.3 Calibration of temperature sensors 51
6.6.3.4 Loading of containers 51
6.6.3.5 On-shore cold treatments 52
6.6.3.6 In-transit cold treatments 53
Attachment to section 6.6.3.6 55
6.6.4 Appendix 12 – Irradiation 56
6.6.4.1 Dosimetry 57
6.6.4.2 Dose Mapping 57
6.6.4.3 Facility records and traceability 57
6.7 Table grape fumigation requirements – Treatment for disinfestation of redback spiders - ***Latrodectus hasselti*** 58
6.7.1 General requirements 58
6.7.2 Treatment 58
6.7.3 Traceability 59
6.7.4 Additional precautionary measures 59
SECTION 7 EXPORTER RESPONSIBILITIES 60
7.1 General requirements 60
7.2 Exporter Inspection 61
7.2.1 Split consignment inspections 61

7.3 Documentation 62
7.4 Rejected produce 62
7.5 Security of produce 63
7.6 Audit 63
7.6.1 Non-compliance 63
SECTION 8 GOVERNMENT RESPONSIBILITIES 64
8.1 Department of Agriculture Horticulture Export Program structure 64
8.1.1 Director – Horticulture Export Program 64
8.2 Department of Agriculture Regional Offices 65
8.2.1 Registration requirements 66
8.2.2 Sampling requirements 66
8.2.3 Department of Agriculture inspection procedures 66
8.2.4 Consignment line samples 66
8.2.5 Rejection procedures 67
8.3 Audit 68
8.3.1 Audits after product rejections by the Department of Agriculture 68
8.4 Fruit fly area freedom – State Departments 70
8.4.1 Validation of area freedom 70
8.4.2 Trapping 71
ATTACHMENT 1 NEW ZEALAND PEST LISTS 72
AVOCADO 72
BANANA 77
CAPSICUM 80
CITRUS 89
CUCUMBER 95
GRAPE 103
LYCHEE 111
MANGO 112
MELON 115
PAPAYA 123
PINEAPPLE 125
PUMPKIN 129
STRAWBERRY 133
TOMATO 137
WATERMELON 143
ZUCCHINI & SCALLOPINI 150
ATTACHMENT 2 FORMS 154
2.1 APPLICATION FOR GROWER REGISTRATION 154
2.2 APPLICATION FOR REGISTRATION OF: PACKHOUSE / FREIGHT FORWARDER / LOAD OUT FACILITY / EXPORT INSPECTOR (DELEGATE) 155
2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION 156
2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 157
2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT 158
2.6 INSPECTION RECORD 160
2.7 FUMIGATION RECORD 161
2.8 COLD DISINFESTATION RECORD 163
2.9 WITHDRAWAL NOTICE 164
2.10 SUSPENSION NOTICE 165
2.11 DECLARATION OF DIMETHOATE TREATMENT 166
2.12 CONTAINER REPORT SHEET 167

2.13 AVOCADO GROWER DECLARATIONPORT SHEET.....168

AMENDMENT RECORD

Amendments to this manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	s. 22(1)(a)(ii)	18 June 1999
2		14 July 1999
3		27 April 2000
4		March 2001
5 5A 5B 5C		29 April 2002 March 2002 December 2004 January 2006
6 6A 6B 6C 6D 6E		August 2006 August 2007 March 2011 May 2011 July 2013 April 2014
7		
8		
9		
10		

GLOSSARY OF TERMS

ANVAS	Avocado Nursery Voluntary Accreditation Scheme
AA	Approved Arrangement
Dmin	The localized minimum absorbed dose within the process load
Dmax	The localized maximum absorbed dose within the process load
EXDOC	Department of Agriculture electronic export documentation system
EX28	Notice of Intention to Export/Export Permit
EX161	Inspection advice notice
EX186	Transfer Certificate
EX222	Approved Arrangement equivalent of EX28
ED	Exporter Delegate
Gray (Gy)	Unit of absorbed dose where 1 Gy is equivalent to the absorption of 1 joule per kilogram
IHS	Import Health Standards (New Zealand)
MeV	Mega Electron Volt
MAP	Maximum Allowable Prevalence
MICoR	Manual of Importing Country Requirements; Export conditions database
MPI	Ministry for Primary Industries (New Zealand)
NZ BQA	Australia-New Zealand Bilateral Quarantine Arrangement
RFP	Electronic Request for Permit
SOM	Systems Operation Manual (this document)

DEFINITIONS

Department of Agriculture Inspection	An inspection of any number of packages from one exporter from the same treatment pathway presented for inspection at one time.
Consignment line inspection	Inspection consists of commodities from a common treatment pathway. The inspection lot can be made up of different growers provided grower line inspections have been undertaken.
Grower line inspection	Inspection that must be performed prior to the Department of Agriculture inspection and consists of one grower, one commodity and one treatment pathway.
Maximum allowable prevalence	The level of infestation that is the threshold, above which phytosanitary actions based on inspection would be applied.
Phytosanitary certificate	A certificate issued in accordance with Article V of the International Plant Protection Convention or at the request of a foreign country authority.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a hand).

INTRODUCTION

The Australia-New Zealand Bilateral Quarantine Arrangement (NZ BQA) is a formal agreement between the Australian Government Department of Agriculture and the New Zealand Ministry for Primary Industries (MPI), to ensure New Zealand's pre-export requirements are documented. This manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The NZ BQA details a series of treatment appendices that describe the requirements for a particular treatment for fruit fly host material. The structure incorporates developments in relation to the documentation of New Zealand Import Health Standards (IHS) on a commodity-by-commodity basis.

Scope of the manual

This Systems Operation Manual (SOM) is designed to ensure:

a) Only approved fruit fly host commodities are exported to New Zealand;
b) Homogeneity of fruit fly host commodity consignments;
c) Approved treatments for fruit fly host produce are used;
d) Required levels and intensity of inspection of fruit fly host produce are maintained;
e) Post treatment security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce;
f) Trace back to grower/packer/treatment centre (as appropriate); and
g) Accurate phytosanitary certification in accordance with New Zealand requirements.

Department of Agriculture Regional Offices and State Departments of Agriculture (or equivalents) are to conduct management audits of the systems to ensure state responsibilities are being adequately performed and recorded.

This SOM gives instructions for audit procedures and maintenance of records that will be the responsibility of Department of Agriculture Regional Offices, and where applicable State Departments of Agriculture or their equivalents.

SECTION 1 PEST CATEGORIES

1.1 Pest categories

MPI have commenced the re-categorisation of pests as regulated and non-regulated pests. Certain regulated pests are deemed by MPI to be high impact pests which is divided into high impact fruit flies and high impact non fruit flies. High impact fruit fly categorisation is equivalent to the previous Risk group 3 (RG3) and high impact non fruit fly equivalent to Risk group 2 (RG2) pest categories.

As MPI review current IHSs, the existing risk categories of Risk group 1 (RG1), RG2 and RG3 will be transcribed into the new categories.

1.1.1 Risk group 3 (RG3) pests

Are pests which upon entry into New Zealand would cause major market access disruption for a wide range of New Zealand commodities and/or have significant effects on environment or agricultural production. This group includes species of economically significant fruit flies.

These pests require treatment to be undertaken in Australia with documented procedures to ensure Department of Agriculture phytosanitary certification is accurate and auditable by MPI.

If this level pest is detected in New Zealand then the consignment will be re-exported or destroyed and the treatment pathway suspended until such time as a Department of Agriculture audit is conducted, and any associated corrective action is undertaken and results accepted by MPI.

1.1.2 Risk group 2 (RG2) Pests

Are pests which upon entry into New Zealand could cause major market access disruption and/or have significant effects on environment or the agricultural production of a particular commodity.

These pests require some form of management practice to be undertaken (i.e. infield controls, area freedom, or post harvest treatments). An additional declaration to this effect must be made on the phytosanitary certificate.

If this level pest is detected in New Zealand the consignment will be re-exported, destroyed or where appropriate ordered for appropriate treatment. There will be no suspension of trade but a follow up Department of Agriculture audit will be conducted to determine cause of the system failure and associated corrective actions undertaken. The Department of Agriculture may suspend specific commodity pathway until cause of failure is determined and corrective action undertaken.

1.1.3 Risk group 1 (RG1) pests

RG1 pests are those pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

These pests require no specific formal treatment or controls, the Department of Agriculture will inspect for these pests at export inspection, if detected the consignment must be subjected to appropriate treatment/re-conditioning and represented for exporter/exporter delegate (ED) Department of Agriculture inspection.

If this level of pest is detected in New Zealand the consignment would be available to be re-conditioned, subject to appropriate treatment (if available), re-export or destroyed.

1.1.4 Non regulated pests

These pests have an unlimited tolerance during inspection and are regarded as non-actionable pests between Australia and New Zealand. It should be noted that excessive levels of non-regulated pests may interfere with Department of Agriculture inspection and may result in longer inspection times to ensure accurate identification.

1.1.5 Regulated pests

Regulated pests are regarded as actionable pests between Australia and New Zealand. Actions would be undertaken if they were intercepted/detected. As well as quarantine pests, these include new organisms as defined by the New Zealand *Hazardous Substances and New Organisms Act 1996*, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants.

1.2 Maximum pest levels

Table 1 details inspection levels and tolerances that will ensure that a 95 per cent confidence level that maximum allowable prevalence (MAP) will not be exceeded.

The sample size must be selected/nominated by the exporter or exporter delegate prior to commencement of inspection and cannot be varied. This sample size must be maintained in all subsequent inspections, including Department of Agriculture export inspection.

Table 1 INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weed seeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 – 2000	520	0	≤ 7	0
2001 – 3000	550	0	≤ 7	0
3001 – 4000	560	0	≤ 7	0
4001 – 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

Tolerances for irradiated product listed in Appendix 12.

1.3 Contaminants

Consignments contaminated with soil, or other potential carriers of quarantine pests (e.g. leaf litter) must not exceed tolerances below. The consignment may be reconditioned to remove the infestation. After reconditioning, the consignment must be re-inspected and may be exported if found free from infestation.

Consignment lines contaminated with soil in excess of 25g per 600 units shall be washed free of soil prior to release, re-shipped, or destroyed at the importers choice and expense.

Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped, or destroyed at the importers option or expense.

SECTION 2 TREATMENT APPENDICES

2.1 Summary

The NZ BQA is divided into separate treatment pathways, called treatment appendices.

The appendices form the framework for the treatment of commodities for the species of economically significant fruit flies (RG3 pests).

The treatment appendices are treated as separate distinct pathways and as such commodities exported under the same treatment pathways may be inspected together at Department of Agriculture inspection. Commodities from separate treatment pathways may not be combined for inspection.

TREATMENT FRAMEWORK
(APRIL 2014)

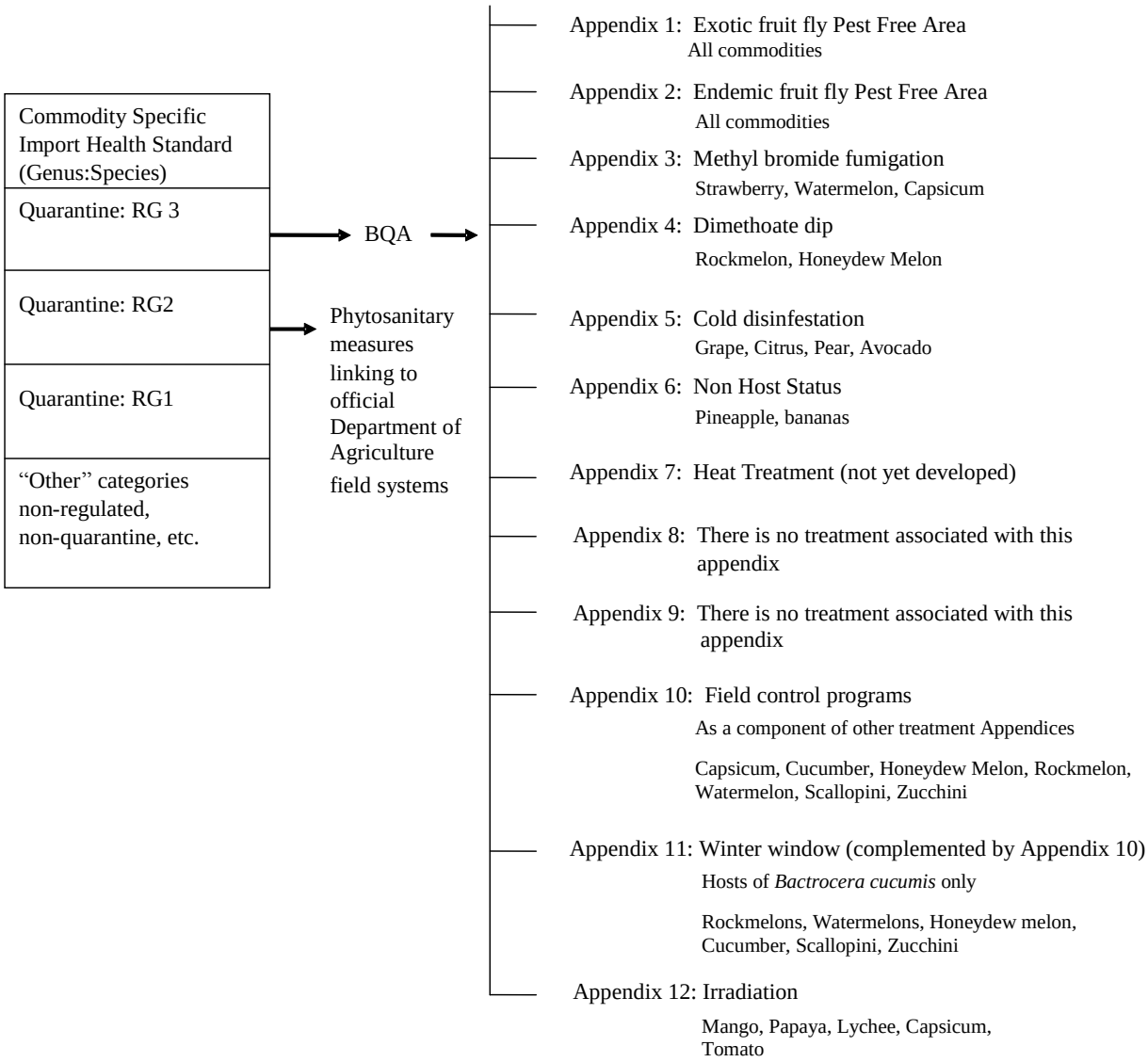


Table 2 SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Avocado *Persea americana*	Area freedom *Appendix 2*	✓	✓		✓	✓	For full condition text, please consult the MICoR database.
	Cold storage In-transit cold disinfestation treatment *Appendix 5* 1 °C (±0.2 °C) for 16 Days	✓	✓	✓	✓	✓	

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Banana *Musa* spp.	Non-host status (Based on maturity) *Appendix 6*	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Capsicum *Capsicum annuum*	Area freedom* *Appendix 2*	✓	✓		✓	✓	For full condition text, please consult the MICoR database. * In-field pest control activities throughout the production season are required for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) otherwise irradiation at 250Gy, or fumigation is required.
	Irradiation** *Appendix 12* *150 Gy*	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database. ** Irradiation at 150 Gy can only occur if in-field pest control activities for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) are implemented throughout the production season, otherwise irradiation at 250Gy, or fumigation is required.
	Irradiation*** *Appendix 12* *400 Gy*			✓	✓	✓	For full condition text, please consult the MICoR database. ***The irradiation rate of 400 Gy is for all regulated arthropod pests.
	Methyl bromide fumigation† *Appendix 3*†† 40g/m^3 for 2 hours at ≥ 17 °C and In field control *Appendix 10* Infield pest controls	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database. † Fumigation can only occur in conjunction with Appendix 10 (field control programs) and implementation of specific field pest control activities for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) throughout the production season. If appendices 3 and 10 with field pest control activities for *Conogethes puctiferalis* (yellow peach moth) are not used, then irradiation at 250Gy must be used. Methyl bromide fumigation may be used on capsicum from all states and territories, with the exception of the parts of Western Australia that are outside the Ord River Irrigation Area fruit fly free area. ††Please refer to Table 4 (pg 46) of *Section 6.6: Treatment Appendices* for methyl bromide fumigation schedules permitted.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Citrus * *Citrus* spp.	Area freedom* *Appendix 2*	*	✓		✓	✓	For full condition text, please consult the MICoR database. * Nil grower registration required under area freedom appendix, as citrus black spot (*Guignardia citricarpa*) is restricted to the state of Queensland.
	Cold treatment (Species specific rates) *Appendix 5*** 0 °C or below for not less than 13 days or 1 °C (±0.6 °C) for 16 days	*✓	*✓	✓	*✓	✓	For full condition text, please consult the MICoR database. *Grower, packhouse, freight forwarder / load-out registration required only for the state of Queensland, where Citrus Black Spot occurs. **Please refer to Table 6 (pg 50-51) of *Section 6.6: Treatment Appendices* for contingency cold treatment schedules permitted for Queensland fruit fly (*Bactrocera tryoni*) outbreaks in pest free areas.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Cucumber *Cucumis sativus*	Area freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Winter Window *Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Grapes *Vitis vinifera*	Area freedom *Appendix 2*	✓	✓		✓	✓	For full condition text, please consult the MICoR database.
	Cold treatment *Appendix 5* 0 °C or below for not less than 13 days or 1 °C (±0.6 °C) for 16 days	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Honeydew melon *Cucumis melo*	Area freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Dimethoate and in field controls ** Appendix 4 & 10*	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database.
	Winter Window ** Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Lychee *Litchi chinensis*	Irradiation *Appendix 12* 250 or 350 Gy			✓	✓*	✓	For full condition text, please consult the MICoR database. * Registration required post treatment.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Mango *Mangifera indica*	Irradiation *Appendix 12* 250 or 350 Gy			✓	✓*	✓	For full condition text, please consult the MICoR database. * Registration required post treatment.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Papaya *Carica papaya*	Irradiation** *Appendix 12* 150 Gy	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database. ** Irradiation at 150 Gy can only occur if in-field pest control activities for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) are implemented throughout the production season, otherwise irradiation at 250Gy is required, or fumigation is required.
	Irradiation *Appendix 12* 250 or 350 Gy			✓	✓*	✓	For full condition text, please consult the MICoR database. * Registration required post treatment.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Pears *Pyrus communis*	Area freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Cold treatment *Appendix 5* 0 °C or below for not less than 13 days or 1 °C (±0.6 °C) for 16 days		✓	✓	✓*	✓	For full condition text, please consult the MICoR database. * Registration required post treatment (for on-shore cold treatment).

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Pineapple *Ananas comosus**	Non-host status (Based on variety) *Appendix 6*					✓	For full condition text, please consult the MICoR database. * Only the varieties 'Smooth Cayenne', 'Aus-Jubilee', 'MD-2' (also known as '73-114') and '73-50' (also known as 'CO-2') are permitted to be exported under this appendix.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Pumpkin *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Rockmelon *Cucumis melo reticulatus*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Winter Window *Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.
	Dimethoate ** Appendix 4*			✓	✓*	✓	For full condition text, please consult the MICoR database. ***** Registration required post treatment.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Scallopini *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Winter Window ** Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Strawberry *Fragaria* spp.	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Methyl bromide fumigation *Appendix 3* 48g/m^3 for 3 hours at a temperature of at least 15°C	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Tomato *Lycopersicon esculentum*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Irradiation *Appendix 12* 150 Gy 400 Gy*			✓	✓	✓	For full condition text, please consult the MICoR database. *The irradiation rate of 400 Gy is for all regulated arthropod pests.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Watermelon *Citrullus lanatus*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Methyl bromide fumigation† *Appendix 3* 32g/m^3 for 4 hours at flesh temperatures of 21–26 °C <u>and</u> In field control *Appendix 10*	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database.
	Winter Window ** Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Zucchini *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Winter Window ** Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

2.2 Appendix 1 – Country freedom from fruit fly

The New Zealand Ministry for Primary Industries (MPI) recognise Australia is free of several species of fruit fly of economic significance to New Zealand (based on MPI Biosecurity Authority Standard 158.03.07).

Australia's freedom status for these fruit flies is maintained through quarantine restrictions and a national monitoring program. The monitoring program is managed by the Australian Chief Plant Protection Office (ACPPO) and consists of exotic fruit fly trapping and monitoring regimes conducted at international airports and seaports.

2.3 Appendix 2 – Area freedom districts within Australia

2.3.1 General requirements

Appendix 2 refers to economic species of fruit flies which are endemic to Australia for which, through trapping and monitoring regimes, area freedom for specific species of fly have been established. The areas listed below have been audited and accepted by MPI as complying with MPI Biosecurity Authority Standard 158.03.06.

Area freedom will be assumed, unless through State Department advice, the Department of Agriculture notifies MPI to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

Queensland fruit fly

For Queensland fruit fly (Qfly), an outbreak will have occurred if:

- One or more larvae or pupae are found in locally grown fruit; or
- Five male Qfly are trapped within 1 km of each other, within a 14-day period; or
- A single gravid female Qfly or larvae is detected.

Mediterranean fruit fly

For Mediterranean fruit fly (Medfly), an outbreak trigger is dependent on the whether supplementary trapping is deployed after a detection of 2 male Medfly within 1 km within a 14 day period. The decision to deploy or not to deploy supplementary traps is made by the applicable State department of agriculture.

Following a detection of 2 male Medfly within 1 km within a 14 day period, larval searches will be conducted within 200 m of the discovery point.

If supplementary traps are not deployed, an outbreak will have occurred if:

- A total of 3 male Medfly are trapped within 1 km of each other, within a 14-day period i.e. the initial 2 flies plus one more; or
- A single gravid female fly or larvae is detected.

If supplementary traps are deployed (at the rate of 16 traps within 200 metres of the discovery point), an outbreak will have occurred if:

- A total of 5 male Medfly are trapped within 1 km of each other, within a 14-day period i.e. the intital 2 flies plus 3 additional flies; or
- A single gravid female Medfly or larvae is detected.

In cases where an outbreak criteria outlined above are triggered, 'Area Freedom' will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80 km of the outbreak site, however

- For State Departments which have managements and control procedures which have been approved by MPI as meeting the requirements and conditions of MPI Biosecurity Authority Standard 158.03.06, the suspension period will be reduced to;
    - For Qfly—one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site;
    - For Medfly— one generation time plus 28 days, or 12 weeks, whichever is longer, and the suspension zone will be a radius of 15 kms for a single outbreak site;
    - Should 2 outbreak sites occur within 1 – 3 km of each other a 30km outbreak zone will be applied, the zone will be centred on a point mid-distance between two outbreaks.

State Departments of Agriculture (or equivalent) must report all fruit fly detections in the recognised zones to the Department of Agriculture Canberra office within 48 hours of detection and identification. This information will then be supplied to MPI at the earliest opportunity.

2.3.2 Approved area freedom districts

Districts approved by MPI are listed below.

Sunraysia - Victoria and New South Wales

Note: From 2 April 2014, the Sunraysia pest free area was voluntarily suspended by the Victorian Government until further notice.

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang.

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and areas between.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and areas between.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and areas between.

Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through

the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri,Barmera, Waikerie and areas between.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, the Shire of Mildura and areas between.

Area (i) the Mypolonga Township surrounds.

Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any fruit flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

The Ord River Irrigation Area – Western Australia

This area covers the Ord River Irrigation Area (ORIA) as outlined below. This is for Mediterranean fruit fly area freedom only.

Area (j) Ord River Irrigation Area (Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the town site of Kununurra and north-west of the Ord River).

NOTE: **Should any stages of Risk group 3 fruit fly (alive or dead) be found during Department of Agriculture or industry inspections in Australia, the Department of Agriculture will inform the relevant State Department of Agriculture of the detection. The Department of Agriculture will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.**

Should any stages of Risk group 3 fruit fly (either alive or dead) be found during an MPI import inspection, area freedom certification will be suspended for all districts of Australia until a Department of Agriculture audit determines the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on results of the Department of Agriculture audit.

Should any stages of a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between the Department of Agriculture and MPI.

2.4 Appendix 3 – Fumigation

This treatment pathway allows the export of watermelons, strawberries and capsicums to New Zealand. Fruit must be subjected to methyl bromide fumigation.

Waterlemons and capsicums exported under this pathway must also comply with Appendix 10 which covers field control programs of fruit flies. Therefore strawberries, watermelons and capsicums may not be combined for inspection.

Fumigation practices must also be carried out in accordance with the current version of the Department of Agriculture's Methyl Bromide Standard.

The Standard contains details for effective fumigation procedures and can be found on the Department of Agriculture website and via the link on the Manual of Importing Country Requirements or MICoR database website.

Note: Methyl bromide fumigation may be used on capsicum from all states and territories, with the exception of the parts of Western Australia that are outside the Ord River Irrigation Area fruit fly free area.

2.5 Appendix 4 – Dimethoate

This treatment pathway allows the export of rockmelons and honeydew melons and to New Zealand. Fruit must undergo mandatory dimethoate treatment. For some commodities this appendix must be used in conjunction with Appendix 10 (field control programs).

2.6 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocados can be treated by cold storage disinfestation for export to New Zealand. Cold disinfestation treatments can be completed on shore or in-transit.

2.7 Appendix 6 – Non host

This pathway deals with commodities which have been accepted by MPI as non-host of endemic Australian fruit flies, either based on maturity (i.e. mature green bananas) or by approved varieties (pineapples). Only pineapples of the 'Smooth Cayenne' variety or approved varieties that are genetically ≥ 50 per cent 'Smooth Cayenne' and bananas can be exported under this pathway.

Bananas are accepted as being non-hosts to the fruit fly species of economic significance present in Australia when in the unripe stage of maturity.

Bananas must be harvested, packed and exported in the unripe (i.e. mature green) stage to New Zealand. Consignments containing bananas at the colour break to full ripe stage will be rejected for export to New Zealand.

2.8 Appendix 7 – Heat treatments

At this time there are no commodities permitted for export under this pathway.

2.9 Appendix 8 – Not currently in use

2.10 Appendix 9 – Not currently in use

2.11 Appendix 10 – Field control programs

The field control programs referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies.**

This appendix is intended to be used in combination with other appendices rather than as a stand-alone treatment. For example, honeydew exports to New Zealand under the dimethoate dip treatment

require both a post-harvest dip and pre-harvest field control program – a combination of both Appendix 4 and Appendix 10.

Treatment	Commodity
Appendix 3 – Methyl bromide fumigation	watermelon and capsicum
Appendix 4 – Dimethoate	honeydew melon, rockmelon
Appendix 11 – Winter window	rockmelon, honeydew melon, cucumber, watermelon, zucchini, scallopini

2.12 Appendix 11 – Winter window

A 'winter window' access period has been negotiated between MPI and the Department of Agriculture, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly).

Winter window access specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment. The access period is between **1 May and 1 September in any year** (arriving in New Zealand).

Rockmelons, scallopini, honeydew melons, zucchini and **cucumbers** can be exported under this appendix from areas recognised free from Mediterranean fruit fly. Currently areas recognised free of Mediterranean fruit fly are the Ord River Irrigation Area in Western Australia and the states of Queensland, New South Wales, Victoria, the Northern Territory, and Tasmania.

As cucumber fruit fly (*Bactrocera cucumis*) is the only RG3 pest listed for watermelons, this commodity can be exported under this appendix from all areas of Australia.

2.13 Appendix 12 – Irradiation

Mangoes, lychees, papayas, tomatoes and capsicums may be exported under this treatment pathway.

Mangoes and lychees

The minimum treatment rate, specified by MPI, for mangoes and lychees exported from Australia is 250 Gy. This minimum irradiation rate is deemed to be effective for those fruit flies and regulated arthropods within the commodity pest listings for mangoes and lychees (see Attachment 1).

Tomatoes

The minimum treatment rate specified by MPI for tomatoes exported from Australia is 150 Gy. This minimum irradiation rate is deemed to be effective for all fruit flies.

Capsicum and papayas

The minimum treatment rate, specified by MPI, for papaya and capsicum exported from Australia is 150 Gy. The 150 Gy treatment is accepted by MPI as an effective treatment for fruit fly pests. However, if this rate is chosen, then effective in-field management practices must be undertaken for *Conogethes punctiferalis* (yellow peach moth) prior to export.

For capsicums and papaya, if irradiating at 150 Gy there is an option to fumigate with methyl bromide as a control for yellow peach moth if the grower has chosen not to implement field control programs.

A treatment option of irradiation at 250 Gy is also available for papaya and capsicum where no in-field yellow peach moth control is undertaken. The 250 Gy treatment option has been accepted by MPI as effective for fruit flies and *Conogethes punctiferalis*.

Alternative treatment rates

400 Gy has been approved as a generic treatment rate for all insects on mangoes, lychees, tomatoes and capsicum - excluding adult or pupae of Lepidopteran species, Acari (excluding Tetranychidae) and vectoring species (identified as [vect] in the commodity pest lists).

Should efficacy data not be on file for other arthropods irradiated at 400 Gy, corrective/treatment actions may need to be instigated prior to the Department of Agriculture endorsing the consignment or MPI releasing the consignment, should the pest interception be encountered upon arrival in New Zealand.

Vectors

If vectors are found in the consignment during phytosanitary inspection, the consignment must either be rejected for export or fumigated. Note: Vectors are identified in the SOM pest lists with the following (vect.).

Plant pathogens

If a plant pathogen is found in the consignment during phytosanitary inspection, the consignment must be rejected and is not eligible for export.

Lepidoptera

If Lepidoptera adults or pupae are found during Department of Agriculture phytosanitary inspection, the consignment must be fumigated. Where Lepidopteran adults or pupae are detected on-arrival in New Zealand, the effectiveness of the irradiation dose will be subject to review based on the pest intercepted.

Mites

If mites from the order Acari (excluding those from the family Tetranychidae) are found during Department of Agriculture phytosanitary inspection, the consignment must be treated at 500 Gy or fumigated. Where mites from the order Acari (excluding those from family Tetranychidae) are detected on-arrival in New Zealand the effectiveness of the irradiation dose will be subject to review based on the pest intercepted.

- 400 Gy will manage all Tetranychidae
- 500 Gy will manage all other Acari

To prevent delays in collating this information, treatment certificates stating Dmin and Dmax doses are to be supplied to MPI with all exported consignments.

Detection of a live arthropod pest in a consignment at inspection by Department of Agriculture or MPI, does not necessarily result in the consignment being rejected for export. Sterility of the pest is

an acceptable outcome on this treatment pathway and may result in the pest still being alive after treatment.

The Food Standards Australia & New Zealand (FSANZ) *Australia New Zealand Food Standards Code* for irradiated tropical fruits has a Dmax of 1000 Gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at www.foodstandards.gov.au and www.foodsafety.govt.nz.

SECTION 3 GROWER RESPONSIBILITIES

3.1 Summary

Treatment Pathway	Commodity	Requirement
Appendix 2 Area Freedom	Avocados	Growers must register with the Department of Agriculture to maintain field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Capsicum	Growers must register with the Department of Agriculture for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory methyl bromide fumigation).
	Grapes	Growers must register with the Department of Agriculture to maintain field controls for the RG 2 pest *Conogethes punctiferales*. Department of Agriculture will certify southern state grapes area free for the RG 2 pest *Maconellicoccus hirsutus*
	Other	Growers are not required to register with the Department of Agriculture for export under this treatment.
Appendix 3 Fumigation	Strawberries	Growers are not required to register with the Department of Agriculture for export under this treatment.
	Watermelons	Growers must register with the Department of Agriculture under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production
	Capsicum	Growers must register with the Department of Agriculture under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 4 Dimethoate	Honeydews	Growers must register with the Department of Agriculture under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 5 Cold Treatment	Avocadoes	Growers must register with the Department of Agriculture to maintain field controls for the RG 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Citrus	Queensland growers must register with the Department of Agriculture to maintain field controls for the RG 2 pest *Guignardia citricarpa* (citrus black spot). Other state departments survey for citrus black spot, negating the need for grower registration.
	Grapes	Growers must register with the Department of Agriculture to maintain field controls for the RG2 pest *Conogethes punctiferales* (yellow peach moth). The Department of Agriculture will be certifying Southern State grapes area free for the Risk group 2 pest *Maconellicoccus hirsutus* (hibiscus mealybug).

Treatment Pathway	Commodity	Requirement
Appendix 6 Non Host	Pineapples	Growers are not required to register with the Department of Agriculture for 'Smooth Cayenne' and other approved related varieties pineapples under this treatment. Growers must keep records verifying 'Smooth Cayenne' and other approved related vareities' parentage.
	Bananas	Growers are required to register with the Department of Agriculture to maintain field controls for the high impact non fruit fly pest *Maconellicoccus hirsutus* (pink hibiscus mealy bug).Unless opting for mandatory fumigation.
Appendix 10 In field controls	All commodities	All commodities which require Appendix 10 (In field controls for fruit fly) must be registered.
Appendix 11 Winter window	Rockmelons, honeydew melons, cucumbers, watermelons zucchinis and scallopinis	Growers must register with the Department of Agriculture under Appendix 11 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 12 Irradiation	Mango, Lychee & Tomato	Growers are not required to be registered under this pathway.
	Papaya & Capsicum	Growers must register with the Department of Agriculture to maintain field controls for Risk Group 2 *Conogethes punctiferalis* (yellow peach moth) if exporters intend to irradiate at 150 Gy.

3.2 General requirements

Growers of commodities requiring registration must maintain spray diaries and implement field hygiene requirements that demonstrate appropriate management and recording for those pests listed as RG2 and RG3 in the pest lists (Attachment 1).

3.3 Registration

Application for registration (Attachment 2.1) will be made to the Department of Agriculture office in the grower's region. To ensure there are no delays with processing and completing registrations it is recommended that applications be forwarded to the Department of Agriculture no later than 6 weeks prior to export. Applications are processed in order of receipt; late applications may be subject to delays. Applications must include a property map identifying blocks on which the relevant NZ BQA commodities are grown.

Growers may apply direct to their regional Department of Agriculture office or to the packhouse they are supplying. Packhouses must forward any grower applications through to the Department of Agriculture as soon as possible for inclusion on the regions "master" grower/packer list.

Once application for registration is received regional Department of Agriculture staff will organise a time to visit the property to conduct a preliminary audit. During the visit the inspector will ensure the grower(s) are aware of their responsibilities under the SOM, check relevant documentation eg spray diaries, conduct an inspection of the property (registered blocks), and will allocate a grower registration number.

Growers that have previously registered under this arrangement in the previous season without non-conformance will not require a Department of Agriculture visit prior to export commencement. However, an audit must be performed early in the season.

NOTE: In the above circumstance, growers MUST notify the Department of Agriculture of their intent to commence export at least 6 weeks prior to export. Growers must provide evidence that required control measures have been carried out (eg spray diaries). If Department of Agriculture approval is granted, a time for an audit visit will be organised. Failure to comply with these directions may mean growers, irrespective of previous participation, will require an 'initial audit' before being allowed to commence export.

3.4 Orchard responsibilities

Growers must apply recommended field controls a minimum of 4 weeks prior to commencement of harvest. Field monitoring and spray diary records must be kept for all activities relating to registered blocks. The applicable grower declaration form (Attachments 2.13, and 2.14) for the product must be completed and accompany each consignment of product intended for export.

NOTE: the Queensland Government Department of Agriculture, Fisheries and Forestry previously issued a farm note (F76/DEC92) which detailed requirements for field control programs against infestation of *Bactrocera cucumis*, these constituted the minimum requirements for the control of fruit fly. This farm note is no longer in print but the requirements are still accepted by the Australian Government Department of Agriculture. Newer chemicals developed and registered for the control of fruit fly may be utilised. All spray programs to meet Department of Agriculture requirements must be carried out at the recommended label rates. All activities relating to field controls must be recorded and held on file for a 12 month period.

Growers are permitted to use the services of a state registered crop monitor. Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered grower. Records including spray regime and recommendations must be available to the Department of Agriculture upon request.

NOTE: All cartons of produce must be marked with grower number and packhouse number to enable traceback.

3.4.1 Citrus growers

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer) — however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the southern states of New South Wales, Victoria and South Australia are not specifically required to be registered for this program, monitoring and spray diaries must be kept.

3.4.2 Avocado growers

All avocados must be sourced from growers and blocks registered with an official tree certification scheme (such as the Avocado Nursery Voluntary Accreditation Scheme or relevant state departments) to ensure freedom from avocado sun blotch viroid and undergone appropriate pest control activities that are effective against or been sourced from an area free (verified by an official detection survey) from cercospora spot blotch (*Pseudocercospora purpurea).*

In addition to the standard grower requirements listed in Section 3.3, avocado growers must supply the following documented evidence for registration:

a) Grower maps to include indexed and non-indexed fruit;
b) Official verification of orchard freedom from sun blotch viroid;
c) Sterilisation procedures between indexed and non-indexed blocks;
d) Buffer zone/s between indexed and non indexed blocks (i.e. row spacing between blocks); and
e) Pruning procedures to prevent sun blotch viroid re-infestation (i.e. no foliage or fruit contact with soil or neighbouring avocado trees).

NOTE: Further details on avocado accreditation for sun blotch viroid can be sourced from the Australian Avocado Growers Association or State Government Departments of Agriculture (or equivalents).

3.5 Audits

The Department of Agriculture will audit growers to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency*

Growers will receive an initial audit prior to season commencement (or early in export season if previously registered subject to conditions above) and one further audit during the season.

For winter window commodities, the Department of Agriculture will undertake monthly audits of the property throughout the growing/harvesting season in the initial season (where substantial compliance is recorded then audit frequency will be reduced to 2 monthly intervals).

The Department of Agriculture will conduct audits of registered growers throughout the growing/harvesting season. All audits of growers will be charged at standard fee for service rates, these details are available from Department of Agriculture regional offices or www.daff.gov.au/fees/biosecurityfees-charges/export.

NOTE: the Department of Agriculture audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure the requirements of the new treatment are being met, and to identify any problems or potential problems with implementing the treatment.

All Department of Agriculture audits will be ‘announced’ audits giving the grower at least two days notice.

Unannounced monitoring audits may be conducted if they are deemed necessary by the Regional Export Manager. Unannounced monitoring audits are not chargeable unless major non-conformities have been recently identified, or are detected during the audit.

Department of Agriculture audits of grower responsibilities may be conducted simultaneously with packhouse and/or exporter audits.

NOTE: Where a grower elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional

office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

3.5.1 Non Compliance

If minor non-compliances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-compliance is identified, the Department of Agriculture Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A grower found to be not managing orchard(s) in accordance with this manual, through consistent non-compliances, may be suspended from the New Zealand export program.

The timing of the follow up audit is dependent on the problem and its relationship to growing/harvesting of the current crop. Department of Agriculture inspectors will determine if follow up audits are required.

3.5.2 Packhouse Approved Arrangement systems

Where a packhouse has an Approved Arrangement (AA) with the Department of Agriculture and is packing a commodity for which grower registration is required, the packhouse must register and audit growers in the following manner:

a) On initial registration;
b) Following registration at least once during the growing season; and
c) In subsequent seasons once during each growing season.

During Department of Agriculture auditing of AA establishments, a sample of registered growers will be reviewed for compliance with the requirements of the SOM. If a major non-compliance is detected, the suspension of the packhouse may be considered necessary as it is the packhouse that is responsible for ensuring compliance with the Department of Agriculture/New Zealand requirements. Department of Agriculture audits of growers registered by the packhouse will be conducted on the following basis:

a) In the initial year of registration – 5 per cent of all growers;
b) Subject to compliance the previous year – 2½ per cent of all growers;
c) If non-compliances were detected at a previous audit – increase random selection of growers to 10 per cent of all growers.

3.5.3 Security and supervision

Security of commodities requiring field control programs (i.e. Appendix 10), or where the treatment pathway is management practices (i.e. Appendix 2 and 6), will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

SECTION 4 CROP MONITOR RESPONSIBILITIES

4.1 Registration

Crop monitors must register with the Department of Agriculture (Attachment 2.4) to undertake crop monitoring duties for the NZ BQA.

A crop monitor will include in their application, details of relevant registered growers and the commodities covered.

4.2 Audit

Crop monitors will provide registered grower property records upon Department of Agriculture/New Zealand Ministry for Primary Industries (MPI) request. The Department of Agriculture will perform random audits of each registered crop monitor at least once per year/season for each commodity field monitoring service provided. Audits will include randomly selected growers.

If three growers (minimum) are covered by the same crop monitor, and audits reveal substantial compliance, additional grower audits of the crop monitor may be waived by the Export Manager for that year/season.

All audits of crop monitors will be charged at standard fee for service rates.

Where a crop monitor elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional office within a minimum of 10 working days prior to the date of effect.

4.3 Non compliance

If minor non-compliances are detected at audit, corrective action must be taken and a follow up audit conducted within 7 days. If major non- compliances are detected, the Department of Agriculture Canberra office must be contacted as soon as practically possible and an assessment made with regards to immediate suspension until corrective action has been taken.

A crop monitor found to be not meeting responsibilities in accordance with this manual through consistent non- compliances may be suspended from the New Zealand export program.

SECTION 5 PACKHOUSE RESPONSIBILITIES

5.1 General requirements

Packhouses are required to maintain secure conditions for NZ BQA commodities and have documented systems in place to ensure grower identification and segregation is maintained.

All cartons must be marked with a standard trade description in accordance with the *Export Control (Plants and Plant Products) Orders 2011* and some form of grower and packhouse identification (including grower and packhouse number if applicable).

In addition to normal Department of Agriculture registration requirements under the *Export Control (Plants and Plant Products) Orders 2011*, packhouses (where applicable) must be registered specifically for New Zealand. Application for registration (Attachment 2.2) will be made directly to Department of Agriculture regional offices.

5.2 Documentation

Packhouses are responsible for maintaining all documentation, and must provide to the Department of Agriculture the following upon request:

a) Copy of Department of Agriculture endorsed packhouse registration form;
b) List of growers registered with Department of Agriculture who supply to the establishment;
c) Where grower registration is a requirement, a copy of Department of Agriculture endorsed grower registration forms;
d) Receival/despatch records of produce from individual growers.

Export documentation will be held on file for 2 years (minimum) and are subject to Department of Agriculture /New Zealand Ministry of Primary Industries (MPI) audit.

5.3 Delegation of exporter responsibilities

5.3.1 General

Where a packhouse has been delegated exporter responsibilities in accordance with directions contained in the SOM, the packhouse must undertake and record all functions delegated to them. Delegated responsibilities may include:

- The security of cleared/treated produce whilst on premise;
- Supervision of loading and unloading of all consignments into and out of the packhouse premise;
- Clear identification of all New Zealand destined produce;
- Documenting all incoming and outgoing produce intended for export under the NZ BQA; and
- Inspections.

Packhouses will be audited to ensure requirements for these functions are known.

5.3.2 Security and supervision

The exporter delegate (ED) will arrange appropriate transportation of treated products to ensure no cross infestation or substitution can occur.

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Full details of the secured product will be included on a transfer certificate (EX186) and/or Notice of Intention to Export (EX28/RFP). A Department of Agriculture transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by the Department of Agriculture.

5.3.3 Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand. A copy of grower line inspection records must be presented to Department of Agriculture staff at the time of Department of Agriculture inspection.

Exporter inspection may be undertaken at a packhouse when delegated. See Section 7.2 for more details about exporter delegate inspections. A packhouse inspection will satisfy requirements for an exporter inspection if performed by an approved ED. Inspections must be recorded (refer to Attachment 2.6) and retained for audit purposes. A copy of the inspection record must accompany the consignment to the Department of Agriculture inspection.

If the exporter (or exporter delegate) opts for the Department of Agriculture to carry out a consignment line inspection, then copies of grower line inspection records must be presented to staff at the time of the Department of Agriculture inspection.

5.4 Audit

The Department of Agriculture will audit packhouses to ensure compliance with NZ BQA requirements. Details of these audits can be found in *Table 7 – Audit Frequency.*

Grower registers, staff training, completion and storage of records and security responsibilities will be audited by the Department of Agriculture. Variance to audit requirements can be made at the discretion of the Export Manager.

AA packhouses will be audited for compliance with the NZ BQA as per the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*"QOPS Ref. No: E/5004/AP

All audits of packhouses will be charged at standard fee for service rates, these details are available from Department of Agriculture regional offices or www.daff.gov.au/fees/biosecurityfees-charges/export.

Department of Agricuture audits of packhouse responsibilities may be conducted simultaneously with grower and/or exporter audits.

NOTE: Where a packhouse elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

5.4.1 Non compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Department of Agriculture Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A packhouse found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

5.5 Approved Arrangements – Packhouse

5.5.1 General requirements

The following activities must be undertaken by Approved Arrangement (AA) packhouses:

(a) All individual packages must include grower numbers and packhouse numbers;
(b) Declared fruit fly free area packhouses must have a register of all growers' names and addresses and allocated grower numbers for all NZ BQA commodities;
(c) Should area freedom suspension zones be established, packhouses must be able to provide separate registers showing growers who are still in area freedom districts against those who are located within the suspension zone(s). Establishment Quality Manuals are required to show procedures for identification, segregation and packing processes to ensure 'area free' commodities cannot be contaminated whilst on the establishment and/or surrounds;
(d) It is recommended contingency plans are incorporated within quality manuals to address additional procedures required in the event of fruit fly outbreaks. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference;
(e) Packhouses not undertaking official disinfestation treatments and that do not have Risk group 2 or 3 pests; will not need to include additional systems to their Quality Manuals;
(f) Packhouses with Risk group 2 or 3 pests will need to ensure grower registration, commodity segregation; identification and inspections meet the NZ BQA. It is likely some quality manuals will need to be amended or have attached an appendix to meet the new export requirements for NZ BQA;
(g) To gain accreditation, five joint inspections will be undertaken with the Department of Agriculture to assess the ability of packhouse staff to perform inspections in accordance with the directions contained in the SOM.

AA packhouse conducting 'treatments' under the NZ BQA must be registered for this purpose in addition to normal registration requirements. Section 6 of the SOM outlines the requirements for Treatment Centres.

5.5.2 Audit

AA packhouses with NZ BQA responsibilities incorporated into their current Quality Manuals will be audited in conjunction with standard auditing requirements.

Those choosing to separate NZ BQA commodity responsibilities from other AA accreditation will have the two systems audited separately but within the usual audit schedules applying to the establishment.

Establishments packing Risk group 2 pests (host commodities) will have a percentage of those registered growers audited to ensure compliance with the NZ BQA.

Packhouses who elect to register growers of host commodities of Quarantine Risk group 2 pests must also conduct audits of all their registered growers in the following manner;

a) On initial registration;
b) Following registration, at least once during the growing season; and
c) Continual registration–once during each growing season.

For Department of Agriculture audits, registered growers will be randomly selected on the following basis;

a) Initial year of registration – 5 per cent of all growers registered by the packhouse;
b) Subsequent growing seasons- 2.5 per cent of all growers registered by the packhouse (subject to compliance from previous year);
c) Non-conformance at a previous audit -10 per cent of all growers registered by the packhouse.

Should a major non-compliance be detected at audit, the packhouses will be suspended from the New Zealand program immediately. Depending on the type of non- compliance, suspension from the Department of Agriculture AA may be considered. Such a decision will be made by the Department of Agriculture AA Contact Officer in conjunction with the Regional Manager and Canberra Office.

5.5.3 Inspection requirements

AA packhouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted when the AA establishment has systems in place that;

a) Address grower field controls (horticulture extension officers, reference to crop monitors etc.);
b) Have formal receival inspection records;
c) Have sorter and grader recording systems within the processing line to ensure segregation of grower lines.

In order to properly document inspections for NZ BQA commodities, AA packhouse will undertake “in-line” consignment inspections according to the following table;

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 3 sets out sampling regimes that can be applied as in-line process controls within an AA packhouse. The maximum continuous time run for New Zealand is a 24 hour process. It is extremely important this type of in-line process control is undertaken and recorded for each consignment run of NZ BQA commodities.

All in-line process controls (Table 3) must be undertaken by a Department of Agriculture Approved Inspector. Where inspections are performed as per Table 3, individual grower line inspections are not required.

During inspection, any fruits/vegetables that are soft, bruised or display rot spots will be cut to determine evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all produce cut will be recorded on the inspection sheets.

Packhouse can make up any type of sampling system based on Table 3. However, packhouse must document what regime is to be used before the initial production run and ensure the sampling regime is representative of the consignment(s) being assembled.

Packhouse requirements pertaining to identification, segregation, security and records for all NZ BQA produce must be part of the Process Management System submitted for Department of Agriculture approval.

NOTE: Packhouses will lift 5 per cent of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

5.5.4 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers will be included on all packages covered by the NZ BQA.

For produce being transferred intrastate or interstate, documentation will be required to ensure the receiving company and Department of Agriculture inspector can verify security and integrity of the consignment on arrival. A declaration to the following effect will be made on the ‘EX 222’or internal transfer note as follows:

"*The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by MPI and specified tolerances have not been exceeded.*"

Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

5.5.5 Post treatment security

Where an AA packhouse has accepted exporter delegation for the security, and loading supervision, of NZ BQA commodities, the packhouse will nominate the person(s) who will be responsible for documenting procedures, carrying out, and recording the following:

a) The security of cleared/treated produce whilst on the premises;
b) Supervision of loading and unloading of all consignments into and out of the premises intended for export under NZ BQA;
c) Clear identification of all NZ BQA produce;
d) Documenting all incoming and outgoing produce intended for export to New Zealand.

The exporter/ED will arrange appropriate transportation of certified NZ BQA products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of acceptance of duties on file.

For product not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (EX186) or Notice of Intention to Export (EX28) and signed by a Department of Agriculture inspection officer.

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES

6.1 General requirements

Treatment centres must have documented systems of identification, segregation, process controls, post security treatment and supervision responsibilities.

All staff must be appropriately trained to carry out designated responsibilities.

6.2 Registration

In addition to normal Department of Agriculture registration requirements under the *Export Control (Plants and Plant Products) Orders 2011*, all treatment centres must be registered (Attachment 2.3) specifically for New Zealand. Application for registration will be made directly to Department of Agriculture Regional Offices.

6.3 Audit

The Department of Agriculture will audit treatment facilities to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency.*

Product identification, calibration, load out activity, completion and storage of records, and product security responsibilities will be audited by the Department of Agriculture. Records pertaining to these aspects will be checked for accuracy at audit. Variance to audit requirements can be made at the discretion of the Export Manager.

All audits of treatment facilities will be charged at standard fee for service rates.

NOTE: Where a treatment centre elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

6.3.1 Non compliance

If minor non-compliance is detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non- compliance are detected, the Department of Agriculture Canberra office must be contacted as soon as practically possible, and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A treatment centre found to be not managing their establishment in accordance with this manual through consistent non- compliance may be suspended from the New Zealand export program.

6.4 Post treatment security

6.4.1 Registration

The exporter must nominate, in their application for registration (Attachment 2.5), the person(s) who will be responsible for documenting procedures, carrying out and recording the following:

a) Security of treated produce whilst on the premises;

b) Supervision of loading and unloading of all consignments into and out of the premises;
c) Identification and segregation of consignments intended to be treated; and
d) Documenting all incoming and outgoing produce intended to be exported to New Zealand.

6.4.2 General requirements

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Staff loading containers will ensure minimum time delays in moving commodities from the secure area into container(s). Product must not be left unsecured. Loading procedures must mitigate potential infestation during container loading. If loading at night, lighting must be of a type that does not attract pests (e.g LED).

Approved security measures for security and transportation of produce will include either;

- Full shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet); or
- Full enclosure of each pallet with shade mesh cloth with a maximum opening of 1.6 mm (including the surface area between the bottom row of cartons and the actual pallet), or
- Loading direct into clean panotech vans/containers with units sealed by Department of Agriculture officers; or
- Cool storing unprotected, at temperatures up to 5 °C with a minimum of 1 metre separation between fumigated/treated produce and any untreated product (except commodities treated under area freedom). Signage must be in place in the storage area reiterating this separation requirement; or
- Cool storing protected in secure packages at any temperature (except commodities treated under area freedom).

Should any treatment operator/packhouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Export Manager for assessment and approval.

6.5 Post treatment transportation

The exporter/ED will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

Products transported to another destination for export loading must be subject to strict security provisions. The exporter/ED will ensure the transport medium is clean and other products (i.e. untreated/non-secure commodities), that could cause cross infestation are not loaded without taking appropriate security precautions. That is, either the other commodities are secured or the New Zealand produce is secured (as per Section 6.4.2).

Full details of the secured product will be included on a transfer certificate (EX186) and/or Notice of Intention to export (EX28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by the Department of Agriculture.

NOTE: Export Managers may approve variations to the above documentation requirements to suit a particular state's operations. The use of facsimiles for transferring this information is permitted. Where other than official Department of Agriculture documentation is used, it is recommended audits be undertaken frequently to enable confidence within the systems.

Should inspecting officers find breaches to security during transit; consignments will be rejected. For some commodities reconditioning and re-inspection may occur.

The Department of Agriculture will audit load out facilities to ensure compliance is being maintained.

6.6 Treatment Appendices

6.6.1 Appendix 3 – Fumigation

Fumigation practices must be carried out in accordance with the current Department of Agriculture Methyl Bromide Standard. The Standard contains details for effective fumigation procedures and can be found on the Department of Agriculture website.

All fumigations must be performed with the amount of product space equal to or less than 50 per cent of total air space within the chamber/tent. Fumigation treatment requirements are detailed in Table 4.

Table 4 METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES

Temperature (flesh)	Dose Rates	Times
21 – 26 °C and above	32g/m^3	Watermelon - 4 hours
15 °C and above	48g/m^3	Strawberry - 3 hours
≥ 17 °C and above	40g/m^3	Capsicum – 2 hours

Note: For capsicum fumigated with methyl bromide in conjunction with appendix 10 and infield controls for yellow peach moth (*Conogethes punctiferalis*), or for capsicum sourced from PFAs where growers are not implementing infield control for yellow peach moth (*Conogethes punctiferalis*), the methyl bromide fumigation option of 32 g/m^3 for 2 hours at 21 °C (and above) is acceptable.

Treatment facilities must maintain documented systems. Systems will include:

a) Incoming product identification;
b) Segregation from other produce and clearly marked ‘New Zealand’;
c) Treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment (i.e. batch numbers);
d) Treatment records;
e) How measuring equipment is calibrated, how often and by whom;
f) Security arrangements after treatment;
g) Maintenance of segregation from untreated product;
h) Supervision and security arrangements at loading.

It is recommended individual procedures accompanied by work instructions be written to define the processes and controls. The following criteria should be considered:

a) Address how assessment is made to enable a 50 per cent product capacity, in relation to the overall volume within the chamber or tent;
b) Define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack;
c) How many units will be sampled to measure lowest flesh temperature of product?;
d) If tent fumigation is being performed, by whom and when is the tent checked for holes/tears?;
e) Who, how and when is temperature measuring equipment calibrated? How is this recorded?;
f) Where the in-process gas monitoring lines are located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?;
g) Who checks required fumigation dosage rate once temperature and volume are calculated?;
h) How is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?;
i) Who is responsible for checking the correct amount of fumigant is entered into the chamber/tent?;
j) What procedures are applied to ensure no leaks from the chamber or tent are evident?;
k) What period of time after initial fumigant is released into the chamber/tent will verification readings be made and using what type of equipment?;
l) Calibration of gas measuring equipment is undertaken how frequently and who does this?;
m) Calibration details are recorded where?;
n) At completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?;
o) Who has the authority to sign off the treatment certificates to enable release of produce?;
p) How is product identified as being treated?

NOTE: Regional Export Managers may approve variations to the above documentation requirements to suit a particular state's operating requirements.

6.6.1.2 Department of Agriculture supervision

Flexible tents - Department of Agriculture inspection staff will attend all fumigations being undertaken for NZ BQA. Inspection staff will attend either at commencement of fumigation or prior to completion. The Department of Agriculture will verify treatment dosages, calculations and gas retention general process controls.

Fixed capacity (chambers or fixed tents) -Treatment centres will be supervised at the commencement of the season, and then, providing substantial compliance is attained 2 - 3 times during the season.

Fumigation centres must advise their regional Department of Agriculture office 24 hours in advance of intended fumigation treatments. If the Department of Agriculture is unable to attend at the required times, arrangements can be made to allow treatment to go ahead but define how the Department of Agriculture will manage the supervision requirements.

NOTE: After treatment all product must be identified as 'treated' for identification and traceability purposes.

6.6.2 Appendix 4 – Dimethoate

6.6.2.1 General requirements

Table 5 PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES

Commodity	Dip strength	Tolerance	Dip/spray	Time
Rockmelon	400ppm	±6% (± 24 ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (± 24 ppm)	Dip	Submersed for at least 1 minute

Note: The minimum tolerance for dimethoate sample results is 376 ppm. Treatment centres will be suspended if samples fall below this level. Treatment centres will only be re-instated once an audit has been conducted to identify the cause of the low concentration. Adequate corrective actions must be documented and instigated by the treatment facility. Reinstatement will occur when the Department of Agriculture has confirmed the adequacy of corrective actions and when the Department of Agriculture is in receipt of a conforming dimethoate sample.

Treatment facilities must maintain documented systems. Systems will include:

a) Chemical to must be used by expiry date;
b) Chemical to be stored at temperatures below 40 °C. It has been determined when temperatures rise above 46 °C (for even 1 day), the active ingredient will degrade;
c) That professional advice (laboratory/manufacturer) has been sought, if using any additives to solution, as these can accelerate the degradation of the active chemical concentrate over time;
d) Procedure that ensures that pH levels are checked and adjusted if required, before adding chemical concentrate, as alkaline conditions have an adverse effect on the solution and will increase with time;
e) All products will be free of soil;
f) The treatment must be the last process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted;
g) The treatment centre will nominate a person/s to prepare and record each consignment or batch lot;
h) The treatment centre will prepare treatments immediately prior to use and have systems in place for recording solution strengths. The treatment centre will also record details of the mixing of solution and any topping up during processing which allows for chemical wash out. Details will include times and indicate volumes of product treated at the time of topping up.

Each treatment operator will be required to document their method/s of dipping and must include:

a) Size of the dip tank;
b) Method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc.);
c) Maximum volume of water required for any/each treatment;
d) Amount of chemical needed to achieve the required ppm level active ingredient;

e) Minimum allowable solution level;
f) Maintenance of active ingredient level (i.e. 'top up' levels);
g) Treatment operators will have a system in place identifying treated and untreated products. Labels must be clear and visible on pallets/bins/crates etc;
h) After dipping, all products must be identified as being 'treated'.

NOTE: Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems demonstrating solution can be carried over without losing efficacy.

After treatment all product must be identified as 'treated' for identification and traceability purposes.

6.6.2.2 Waxed produce

The application of waxes or oils prior to dimethoate treatment is prohibited. For treated produce, application of waxes or oils will only be allowed at the discretion of the Export Manager.

6.6.2.3 Sampling

Due to the range of commodities exported under this appendix and their seasonal availability, all sampling regimes within the NZ BQA will be applied within the context of a calendar year (Jan – Dec).

All industry dip samples must be taken at the end of a dipping run. The Department of Agriculture samples where possible (subject to operational constraints), samples will also be taken at the end of a dipping run. This will provide assurances that all product within the dipping process has been exposed to a solution within the required concentration.

There is no requirement for Department of Agriculture inspectors to attend each dimethoate disinfestation treatment. Analysis of chemical dipping strengths, must be verified according to the following sampling guidelines:

Department of Agriculture sampling

Initial year of registration: the Department of Agriculture to be in attendance during the preparation of the first dipping solution. A Department of Agriculture dip sample will be taken from this first treatment run. Department of Agriculture dip samples must be taken during every month thereafter, while the treatment facility is dipping for export to New Zealand.

Continuous registration: Sampling may be extended to twice during dipping activities in a calendar year, provided that substantial compliance has been previously established.

Industry sampling

Monthly for the first 3 months of export activity, with one additional sample to be taken if the treatment period is greater than 4 months.

6.6.2.4 Department of Agriculture audit

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season.

First year of registration: Monthly during the treatment season.

Continuous registration without non-conformance: Twice during the treatment season.

6.6.3 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand.

6.6.3.1 General requirements

Exporters have the option to carry out cold disinfestation treatments on-shore immediately prior to export or in-transit in accordance with the following treatment schedules:

Table 6 APPROVED COLD STORAGE DISINFESTATION TREATMENTS

The core temperature of the fruit to be held continuously at one of the following temperature/time combinations immediately before export or in-transit.

Appendix 5–Cold treatment	Treatment rate and duration	Commodity
Standard rates	1 ºC (±0.2 ºC) for 16 days	Avocado (*Persea americana*)
	0 ºC or below for 13 days or 1 ºC (±0.6 ºC) for 16 days	Grape (*Vitis vinifera*) Pear (*Pyrus* sp.)
	0 ºC or below for 13 days or 1 ºC (±0.6 ºC) for 16 days	All *Citrus* spp. listed in IHS from all Australian areas
OR (applicable ONLY to citrus originating from fruit fly outbreaks in the area freedom districts/PFAs; Sunraysia – Victoria and New South Wales; Riverland – South Australia; Ord River Irrigation Area – Western Australia		
5a	**(Contingency treatment for Queensland fruit fly (*Bactrocera tryoni*) outbreak in a PFA).** 3 °C (±0.5 ºC) for 14 days	Grapefruit (*Citrus paradisi*) Lemon (*Citrus limon*)
5b	**(Contingency treatment for Queensland fruit fly (*Bactrocera tryoni*) outbreak in a PFA).** 3 °C (±0.5 ºC) for 16 days	Mandarin (*Citrus reticulata*) Orange (*Citrus sinensis*) Tangerine (*Citrus reticulata*) Tangor (*Citrus reticulata* x *sinensis*)
5c	**(Contingency treatment for Mediterranean fruit fly (*Ceratitis capitata*) outbreak in a PFA).** 2 °C (±0.5 ºC) for 18 days	Grapefruit (*Citrus paradisi*) Mandarin (*Citrus reticulata*) Orange (*Citrus sinensis*) Tangerine (*Citrus reticulata*)

Appendix 5–Cold treatment	Treatment rate and duration	Commodity
	or 3 °C (±0.5 ºC) for 20 days	Tangor (*Citrus reticulata* x *sinensis*)
5d	**(Contingency treatment for Mediterranean fruit fly (*Ceratitis capitata*) outbreak in a PFA)** 2 °C (±0.5 ºC) for 16 days or 3 °C (±0.5 ºC) for 18 days	Lemon (*Citrus limon*)

6.6.3.2 Temperature recorders

Fruit pulp temperature recorders used for cold treatment must conform to the following requirements:

a) Able to accommodate the required number of sensors;
b) Able to record and store data for the duration of each treatment until such time the information can be examined by the appropriate authority;
c) Capable of producing, or can download the information to produce, printouts which identify each sensor, time and temperature, as well as the identification of the recording unit facility/container number where the treatment was undertaken;
d) Capable of electronically recording readings at least hourly and identifying the time of recording;
e) Capable of recording temperature data in increments of 0.1 °C.

6.6.3.3 Calibration of temperature sensors

The calibration of sensors will be conducted using a slurry of crushed ice and distilled water. At least one minute intervals between two consecutive sensor readings must be allowed during the calibration process; however these intervals must not exceed 5 minutes.

Any sensor which reads outside of the range of ± 0.6 °C from 0 °C must be replaced by a sensor that meets this criterion.

Calibration of temperature sensors must be carried out under the supervision of the Department of Agriculture, with results recorded on Form 2.15 - NZ Fruit Sensor Record of Calibration.

6.6.3.4 Loading of containers

Containers must be inspected by the Department of Agriculture or an authorised load out person prior to loading to ensure freedom from pests and to verify that all vents or other potential entry points for pests are covered. Authorised load out persons must record this container check on Form 2.12 Container Report Sheet.

Containers must be fitted with a tamper proof numbered seal placed on the container door upon completion of loading. The seal number must be noted on the Phytosanitary certificate.

6.6.3.5 On-shore cold treatments

On-shore cold treatments are only permitted to be undertaken at treatment facilities registered by teh Department of Agriculture under the NZ BQA. The Department of Agriculture will maintain records of all establishments registered for cold disinfestation.

All staff must be appropriately trained to carry out designated responsibilities.

Placement of fruit pulp temperature sensors

A minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 m^3 of product or less. For each additional 250 m^3 of product, or part thereof, one additional pulp sensor will be used;

- The warmest area of each cool storage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One pulp sensor will be placed at the warmest area of the cool store. Further sensors will be placed throughout the load in locations representing different areas of the cool store, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors;
- Care must be taken to ensure that the tip of the fruit pulp temperature sensors are not allowed to extend outside of the fruit.

Department of Agriculture supervision

Calibration of sensors for on-shore cold disinfestations must be carried out prior to commencement of treatment and at completion of treatments, with both calibrations supervised by the Department of Agriculture.

If as a result of re-calibration, any sensor produces a different reading than during the initial calibration, a correction factor will have to be taken into consideration when interpreting treatment read-outs. If the application of a correction factor leads to treatment parameters not having been met, the treatment will be deemed to have failed.

Where a treatment has failed, fruit may be re-treated at the discretion of the Department of Agriculture and industry. In circumstances where the Department of Agriculture has documented confirmation that the conditions of the treatment schedule have been maintained since treatment cessation, the treatment may be allowed to continue. Data collection must continue from the time of reconnection of the recording device.

The treatment will be deemed to have begun by the Department of Agriculture once the chamber has stabilised and all sensors have attained the required treatment temperature.

The Department of Agriculture will verify, stamp and sign satisfactorily completed treatment records. Both the Department of Agriculture and the treatment facility are to maintain copies of the treatments on file.

Record requirements

Temperature records will be retained and made available for auditing purposes by Department of Agriculture /New Zealand Ministry for Primary Industries (MPI) upon request, details of records must include:

a) Date and results of temperature sensor calibrations;
b) Date chamber was loaded with produce;
c) Type and variety of produce treated, the quantity by lots involved, all to be identified by grower, packhouse and exporter;
d) Continuous print out records oftemperatures within the chamber throughout the treatment program;
e) Date produce was cleared from chamber with details of post treatment security and dispatch of produce;
f) Date and results of re-calibration of sensors following completion of treatment;
g) Continuous - electronic data log sheets for each cold treatment;
h) All treated product must be labelled as treated to ensure traceability.

Temperature records will be retained and made available for auditing purposes by Department of Agriculture/MPI upon request.

NOTE: After treatment all product must be identified as 'treated' for identification and traceability purposes.

6.6.3.6 In-transit cold treatments

In-transit cold disinfestations treatments may only be carried out in self refrigerated (integral) shipping containers. These containers must be capable of achieving and maintaining the required cold disnfestation schedules in accordance with the SOM.

Placement of temperature sensors

Containers must be packed in a manner which ensures that there is even airflow under and around all pallets and any loose stacked cartons. Care must be taken to ensure that the tip of the fruit pulp temperature sensors, are not allowed to extend outside of the fruit.

Records of fruit pulp temperatures are required from at least three locations. Sensors will be placed into average sized fruits under Department of Agriculture supervision as follows:

- The sensors must be placed in the following locations in a 40 foot container:
    - Sensor No 1: 1st pallet row, 2-3 cartons down from top, 2-3 cartons in from right side
    - Sensor No 2: 5th pallet row, 4-5 cartons down from top, 3-4 cartons in from left side
    - Sensor No 3: 9th pallet row, 6-7 cartons down from top, 2-3 cartons in from left side.

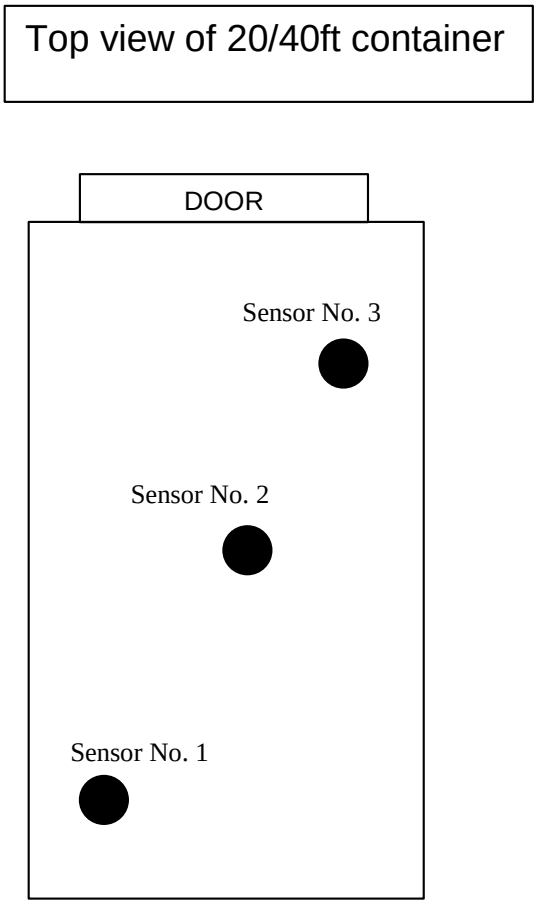
- The sensors must be placed in the following locations in a 20 foot container:
    - Sensor No 1: 1st pallet row, 2-3 cartons down from top, 2-3 cartons in from right side,

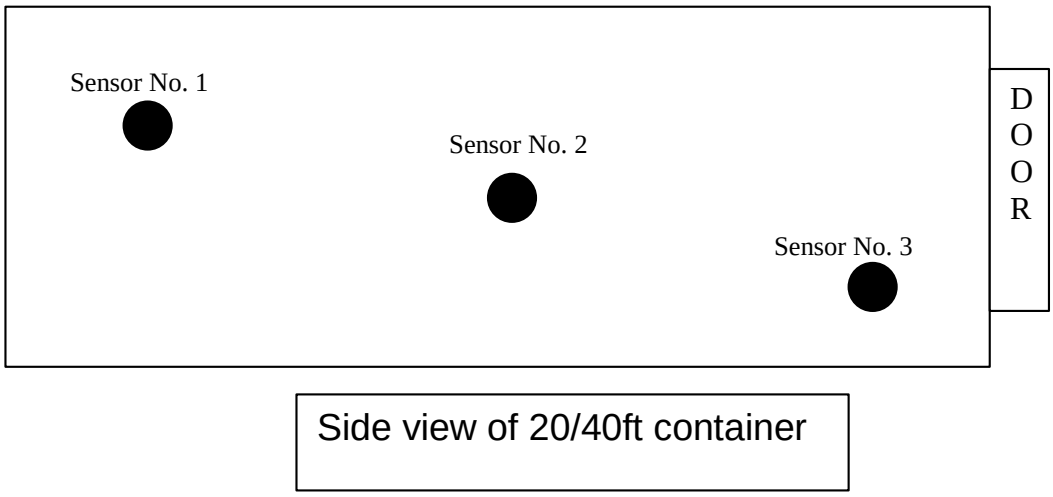
- Sensor No 2: 3rd pallet row, 4-5 cartons down from top, 3-4 cartons in from left side,
- Sensor No 3: 5th pallet row, 6-7 cartons down from top, 2-3 cartons in from left side.

On completion of treatments, printouts (or electronic equivalent) of all temperature sensors will be made available to the MPI officer at the port of arrival for final clearance of the container.

Attachment to section 6.6.3.6

SCHEMATIC VIEW OF PLACEMENT OF TEMPERATURE PROBES FOR IN-TRANSIT COLD TREATMENT OF FRUIT FLY HOST COMMODITIES FOR EXPORT TO NEW ZEALAND





Side view of 20/40ft container

NOTE: Any container openings must be covered or fitted with fruit fly proof mesh to prevent the entry of pests. Mesh or gauze with openings ≤ 1.6 mm is acceptable.

6.6.4 Appendix 12 – Irradiation

Refer to section 2.13 Irradiation, for information specifically relating to the approved treatment rates for individual commodities.

The Food Standards Australia & New Zealand (FSANZ) standard for irradiated fresh produce commodities for phytosanitary pest disinfestation has a maximum absorbed dose (Dmax) of 1000 Gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at www.foodstandards.gov.au and www.foodsafety.govt.nz.

Treatment centres will be required to carry out verification testing to determine the required response on target organisms has been achieved in accordance with International Standard Phytosanitary Measures (ISPM) # 18 - *Guidelines for the use of irradiation as a phytosanitary measure* (www.ippc.int). The records of this verification must be made available to the Department of Agriculture/MPI upon request.

Ionizing radiation may be provided by radioactive isotopes (gamma rays from cobalt-60), electrons generated from machine sources (up to 10 MeV), or by x-rays (up to 5 MeV) (limits set by Codex Alimentarius). The unit of measurement for absorbed dose is gray (Gy).

Treatment procedures must ensure the minimum absorbed dose (Dmin) is fully attained throughout the commodity to provide the prescribed level of efficacy. Owing to the differences in the configuration of treatment lots, higher doses may be required to ensure the Dmin is achieved throughout the configured consignment or lot.

NOTE: After treatment all product must be identified as 'treated' for identification and traceability purposes.

6.6.4.1 Dosimetry

Dosimetry ensures the required Dmin for a particular commodity was delivered to all parts of the consignment. The following conditions for dosimetry systems must be in place:

a) Capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax);
b) Calibrated in accordance with international standards or appropriate national standards (ISO/ASTM 51261 "Selection and Calibration of Dosimetry Systems for Radiation Processing", ISO/ASTM 51204 "Dosimetry in Gamma Irradiation Facilities for Food Processing" and ASTM guide - F1355 "Irradiation of Fresh Fruits as a Phytosanitary Treatment", and ISPM 18);
c) Appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
d) Evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
e) Consider variations due to density and composition of the material treated, shape and size, orientation of the product, stacking, volume and packaging;
f) Dose mapping of the product in each geometric packing configuration, arrangement and product density used during routine treatments must be carried out prior to the approval of the facility. Only configurations approved by the Department of Agriculture can be used for actual treatments;
g) All components of the dosimetry system must be calibrated according to documented standard operating procedures. An independent organisation recognized by the Department of Agriculture should assess performance of the dosimetry system;
h) An accurate measurement of absorbed dose in a consignment is critical for determining and monitoring efficacy and is part of the verification process. The required number, location and frequency of these measurements should be prescribed based on the specific equipment, processes, commodities, relevant standards and phytosanitary requirements.

6.6.4.2 Dose Mapping

a) Dose mapping studies must be conducted to fully characterize the dose distribution within the irradiation chambers and commodity, and demonstrate the treatment consistently meets the prescribed requirements under defined and controlled conditions. Dose mapping data from a minimum of three runs on any particular configuration must be provided to the Department of Agriculture for verification of Dmin points etc. A minimum of three runs in a physical configuration is required for verification of Dmin (standard);
b) Dose mapping must be done in accordance with documented (proven) standard operating procedures. The information from the dose mapping studies is used in the selection of locations for dosimeters during routine processing;
c) Independent dose mapping for incomplete (partially-filled) as well as first and last process loads is required to determine if the absorbed-dose distribution is significantly different from a routine load and to adjust the treatment accordingly.

6.6.4.3 Facility records and traceability

Treatment facility operators must keep and maintain records addressing the areas listed below:

a) Appropriate treatment records for phytosanitary purposes must be kept by the irradiation facility to ensure traceability of treated lots. Records for every treatment must be kept;
b) Dosimetry records must be kept by the treatment facility for at least one full year after treatment. Records must be made available to the Department of Agriculture on request.

Records kept by treatment centres should also address the following:

a) Identification of facility and responsible parties;
b) Purpose of treatment;
c) Target regulated pest(s);
d) Lot size, volume and identification, including number of articles or packages;
e) Identifying markings or characteristics;
f) Quantity in lot;
g) Absorbed doses (target and measured);
h) Date of treatment;
i) Observed deviations from treatment specification.

6.7 Table grape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti*

6.7.1 General requirements

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern.

MPI have directed the Department of Agriculture to either undertake stringent field control programs to eliminate this pest or an agreed treatment effective against redback spiders. The Australian tablegrape industry has opted for mandatory fumigation using a sulphur dioxide–carbon dioxide treatment.

In addition to treatment centre registration, fumigators must be licensed by their appropriate State Department Authority for the use of sulphur dioxide-carbon dioxide fumigants.

Treatment centres carrying out fumigations on tablegrapes must meet the general requirements outlined above for treatment centres and the listed criteria detailed in Section 6.6.1 of the SOM.

6.7.2 Treatment

The mandatory fumigation treatment for redback spiders is a **mixture of 1 per cent sulphur dioxide (SO_2) with 6 per cent carbon dioxide (CO_2) at ambient temperature (above 18 °C) for a period of 30 minutes.**

1 per cent sulphur dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6 per cent carbon dioxide equals 109.69 grams carbon dioxide per cubic metre.

Department of Agriculture inspection staff must sight fumigation treatment records to enable phytosanitary certification of table grapes.

6.7.3 Traceability

If a live redback spider is detected during inspection, systems must be in place to allow trace back to individual fumigation treatments.

6.7.4 Additional precautionary measures

Unused packaging carried over to the following season presents an additional pathway for the introduction of redback spiders into New Zealand.

When carrying unused table grape packaging over, either pest-proofing or disinfestation of the packaging is necessary.

SECTION 7 EXPORTER RESPONSIBILITIES

7.1 General requirements

All exporters of NZ BQA products must be registered with the Department of Agriculture. Exporter applications (Attachment 2.5) will be made to the appropriate regional Department of Agriculture office.

Applications for registration will include details of the commodities and treatment pathways the exporter intends to use to meet with conditions stipulated in the SOM.

The Department of Agriculture will accept the application if details of treatment centres are not known at the time, but exports of the particular commodities will not be permitted until relevant information is provided to the Department of Agriculture.

Exporters are responsible for ensuring that all parties engaged as part of their export pathway, are registered by the Department of Agriculture (where applicable) for specific purposes in accordance with the SOM.

Regional Department of Agriculture offices will endorse BQA registration forms once a registration status has been granted. The endorsed forms will be held by the issuing Department of Agriculture office, with a copy provided to the applicant.

Exporters engaging a BQA registered party, must have a copy of the endorsed Department of Agriculture registration form on file for auditing purposes. Failure by an exporter to engage a Department of Agriculture registered party for specific purposes in accordance with the SOM, may result in a suspension of their export registration status.

Exporters must ensure at all times either directly or by delegation:

a) Product security during loading, transport and export consignment consolidation is not compromised and there can be no substitution or cross infestation of product following treatment;
b) Exporter inspection requirements as detailed in the SOM are performed by qualified staff and records are kept for all inspections performed;
c) Inspection records are given for each grower line presented for Department of Agriculture inspection;
d) Liaison with Department of Agriculture /State Officers takes place as necessary to advise of product movement and inspection requirements;
e) Documentation, including phytosanitary certificate endorsements are maintained.

7.2 Exporter Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand, with full details of the inspection to be recorded (Attachment 2.6). A copy of grower line inspection records must be presented to staff at the time of Department of Agriculture inspection.

Exporter inspections must be undertaken at an appropriate sampling rate, as given in *Table 1* of the SOM. Exporters need to ensure all staff they delegate inspection duties to, have been audited and approved by the Department of Agriculture.

If the exporter (or exporter delegate) opts for the Department of Agriculture to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of the Department of Agriculture inspection.

During exporter inspections, any soft, bruised, rotted, holed or punctured products will be cut to determine evidence of fruit fly infestation. Results of products cut will be noted on the inspection record. A copy of this record must be presented with the consignment for Department of Agriculture inspection. Inspection records together with other documentation relating to the consignment must be held on file for 2 years and is subject to Department of Agriculture /New Zealand Ministry for Primary Industries (MPI) audit.

All inspections, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10.

NOTE: Accredited establishments are not required to undertake end-point inspections if procedures enable a 600 unit in-line inspection and the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

7.2.1 Split consignment inspections

Following exporter/ED grower line inspections, exporters can elect a Department of Agriculture ‘consignment’ inspection even if the ‘consignment’ is to be split to varying destinations and differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any produce not forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: ‘Split consignment’ procedures cannot be implemented until the Department of Agriculture has approved the necessary documentation and record keeping systems.

Exporters/importers wanting to reduce MPI on arrival inspections of split consignments must adopt a system which fully documents the management procedures. Any procedure must include:

a) Notification of consignment details to MPI as they occur;
b) New Zealand communication links (importer and MPI contacts);
c) Flow chart detailing how the phytosanitary certificate moves through the system.

7.3 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers, will be included on all packages covered by the NZ BQA.

A declaration to this effect will be made on the Notice of Intention to Export (Export Permit) (EX28), or EX186 (if appropriate), or in the Exporter Declaration/Comments box in an RFP as follows:

> "The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by NZ MPI and specified tolerances have not been exceeded"

It is important that all manual phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX28, the exporter must maintain a documented link to the EX28. This system must be approved by the Regional Export Manager.

Trace back for electronic phytosanitary certificates drawn from several RFPs is obtained through the EXDOC system.

7.4 Rejected produce

If any stages of live fruit fly are found during an exporter/ED inspection, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other NZ BQA produce, and identified as not suitable for export to New Zealand unless treatment is available under Appendix 12 (select commodities).

The exporter or ED must immediately notify the Department of Agriculture of the detection.

The Department of Agriculture will formally advise and suspend the relevant treatment centre pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

Should during the exporter/ED inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise the Department of Agriculture. The product must be identified as failed for export to New Zealand and segregated from all other NZ BQA products. Reconditioning of consignment may occur where applicable.

The Department of Agriculture will formally advise and suspend the relevant grower pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the occurrence, reinstatement for the NZ BQA may be permitted.

The mutual fumigation recognition arrangement can be used when regulated pests are detected. This arrangement cannot be used as a pre-emptive measure.

Note: Irradiation treatment: If live arthropods (including fruit fly) are found on product that has been irradiated, this will not result in rejection of the consignment if the requisite irradiation rate has been applied (check section 2.13 for exceptions).

7.5 Security of produce

Export shipping or airfreight containers will be inspected by a freight forwarding agent where delegated or exporter for cleanliness and condition (any container openings must be covered or fitted with fruit fly proof mesh to prevent the entry of pests. Mesh or gauze with openings ≤ 1.6 mm is acceptable).

Container inspections can be delegated to a container park. Persons carrying out inspections must be audited to ensure they are aware of their responsibilities. If inspections are carried out at a container park, copies of completed inspection records must be faxed (or sent with container documents) to point of loading and retained on file by both the container park and exporter/freight forwarder etc.

NOTE: It is only necessary to complete the 'Container report sheet' for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

7.6 Audit

Exporters will undergo one audit per year. All relevant documentation for NZ BQA consignments must be made available to the Department of Agriculture upon request.

Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter inspections and documentation (i.e. RFPs, EX186, EX28 and phytosanitary certificates).

Persons approved to act as an ED will undergo two audits per year. Audits will include documentation, knowledge of regulated pests, inspection techniques, sample selection and knowledge of relevant parts of the SOM.

NOTE: Where an exporter elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional office within a minimum of 10 working days prior to the date of effect.

7.6.1 Non-compliance

If minor non-compliance is detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-compliances are detected, the Department of Agriculture Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

An exporter found to be not managing responsibilities in accordance with this manual through consistent non- compliance may be suspended from the New Zealand export program.

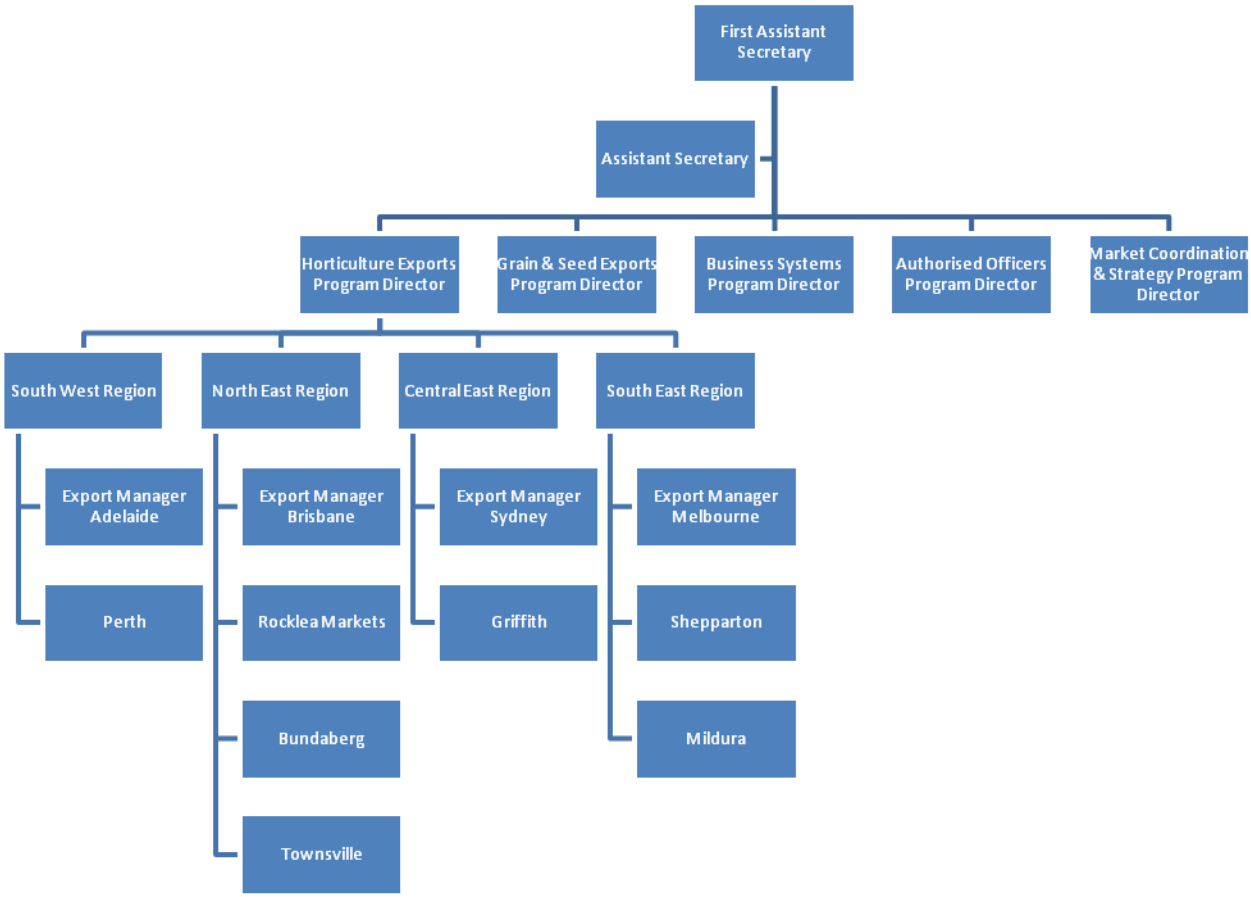
SECTION 8 GOVERNMENT RESPONSIBILITIES

This section details the responsibilities associated for participants under the SOM to ensure requirements of the SOM are adhered to.

All systems will be subject to random audits by the Department of Agriculture Canberra office and the New Zealand Ministry for Primary Industries (MPI) will audit systems at frequent intervals. The audits will include measurement of pathway compliance from growers (where required) through to final export container loading and associated documentation.

8.1 Department of Agriculture Horticulture Export Program structure

The Department of Agriculture organisation structure and management flow chart is provided below. It is recommended that each Department of Agriculture Regional office develop its own organisation structure and management flow chart as it will apply to the management of the NZ BQA, and include this information for distribution within that state.



8.1.1 Director – Horticulture Export Program

Will be responsible for ensuring;

a) All components of the SOM are being complied with consistently, over all commodities and treatments through all states;

b) Regular audits of State Departments (where applicable) and Department of Agriculture systems are conducted by the Department of Agriculture Canberra Office to ensure compliance with the conditions and requirements of the NZ BQA and that a proper record management system is available and easily accessible;
c) The Department of Agriculture Regional offices are conducting audits of AA as detailed in the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP and the requirements of the NZ BQA and this manual;
d) Where non- compliances are found, that suitable corrective action is undertaken and verified by the Department of Agriculture;
e) Collate and circulate up to date national lists for specific commodities of registered growers, packers, and of all treatment centres and exporters;
f) That all amendments to this manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies;
g) That audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalants) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in the Department of Agriculture area freedom certification.

8.2 Department of Agriculture Regional Offices

Department of Agriculture regional offices, through the Regional Managers and Export Managers located in Queensland, New South Wales, Victoria, Northern Territory, Western Australia, Tasmania and South Australia are responsible for the following:

a) The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM;
b) Ensure all exporters, treatment centres, packhouse and growers (where applicable), are meeting the requirements of the NZ BQA and the directions contained in the SOM;
c) Ensure inspection staff are trained in the terms, responsibilities, and conditions for all NZ BQA commodities being exported from that state;
d) Ensure all required components of the export pathways for commodities are registered for that state;
e) Ensure audits (including internal audits), are being conducted at the correct frequency and the measurement of the system and corrective action where required, has been effected and recorded;
f) Ensuring Canberra Office (Horticulture Export Program Director) is informed where any breaches of the conditions of this manual are observed;
g) Ensuring all inspectors in their state, involved in the NZ BQA export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported in any district of Australia;
h) Develop a system of recording registrations, and that such records are maintained so they are auditable;
i) Ensuring the Canberra office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

8.2.1 Registration requirements

Department of Agriculture offices will implement a registration system where applicable for all growers, packhouses, treatment centres and exporters.

8.2.2 Sampling requirements

For the purpose of the treatments detailed in this manual the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

8.2.3 Department of Agriculture inspection procedures

Exporters will provide Department of Agriculture with exporter/ED inspection records prior to inspection. If all export documentation is not provided or incomplete, the consignment will not be inspected.

If the exporter (or exporter delegate) opts for Department of Agriculture to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of Department of Agriculture inspection.

Inspections performed by the Department of Agriculture will be recorded on ‘Inspection Record - New Zealand’ (Attachment 2.6).

NOTE: Alternative types of inspection records can be used as long as they contain the information supplied on the inspection record

Department of Agriculture inspectors must conduct inspections at the same sampling rate (Table 1) undertaken by the exporter/ED.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

Packaging must be checked during the inspection for compliance with the *Export Control (Plants and Plant Products) Orders 2011* and requirements of the SOM.

NOTE: Department of Agriculture will lift 5 per cent of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

On the irradiation pathway, Appendix 12, inspection may be conducted pre treatment OR post treatment.

8.2.4 Consignment line samples

Following exporter/ED inspections, exporters are permitted to present consignment lines to the Department of Agriculture for inspection and phytosanitary certification. Consignment lines consist of commodities from a common treatment pathway (can be different growers).

Where there is more than one grower or commodity presented for Department of Agriculture inspection, the inspector should select sample cartons on the basis of the commodities which may

present the greatest risk. The following points may be taken into account in determining selection of sample cartons:

- From the grower submitting the largest grower line within the consignment
- From the commodity comprising the greatest quantity in the consignment line
- At least one carton from the commodity seen to present the greatest quarantine risk
- At least one carton from any known 'poorer'performing growers/packers or from a newly registered grower or packer.

Consignment lines passed after 'inspection will be identified as 'Passed for New Zealand' and immediately segregated. It is recommended exporters implement a system (i.e. stickers on pallets) to make identification of passed consignments easier.

8.2.5 Rejection procedures

A rejection upon inspection by Department of Agriculture of either a consignment or grower line does not necessarily indicate a packhouse or grower has breached the conditions of the NZ BQA. However the rejection does indicate a possible problem within the packer/exporter system and will be recorded.

All rejections are to be recorded on Department of Agriculture Form EX161 (Inspection Advice) and must detail the grower, packer and export pathway through which the commodity has passed.

Exporters/EDs who fail two inspections in any one season must be audited immediately. This will ascertain any reasons the Department of Agriculture may consider necessary for suspension or corrective actions to be undertaken.

The following conditions will apply for Department of Agriculture inspection rejected products:

Any rejection for RG3 pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of 'Area Freedom', all districts in that state are suspended. Audit/s must be undertaken at the earliest opportunity.

- Under the irradiation pathway, Appendix 12, the detection of an RG3 pest does not result in the suspension of the treatment centre. Irradiation at 150 Gy is deemed effective for RG3 pests.

Any rejection for RG2 pests – Department of Agriculture Canberra office to be informed immediately to consider if audit of grower, packer, exporter or ED is necessary. This may depend on type and quantity of infestation detected. If applicable, the exporter can choose to undertake corrective action (i.e. treatment, withdrawal of the offending grower). e-inspection must be conducted by exporter/exporter's delegate prior to presenting for Department of Agriculture inspection.

- Under the irradiation pathway, Appendix 12, the detection of an RG2 pest does not result in the requirement to undertake corrective action, (except where an RG2 vector is detected).

Any rejection for RG1/regulated pests - The consignment can be totally withdrawn or corrective action undertaken. Corrective action can include treatment, withdrawal of the offending grower. Re-

inspection must be conducted by exporter/exporter's delegate prior to presenting for Department of Agriculture inspection.

- Under the irradiation pathway, Appendix 12, the detection of an RG1 pest does not result in the requirement to undertake corrective action, (except where an RG1 vector or a pathogen is detected). If an RG1/regulated pest under the irradiation pathway is detected at Department of Agriculture inspection, pre or post treatment, 400 Gy will be required to be applied to the consignment as an effective treatment.

8.3 Audit

Department of Agriculture inspection staff will conduct audits of applicable growers, packhouse, treatment centres, exporters and exporter's delegates to ensure compliance with relevant section of this manual.

8.3.1 Audits after product rejections by the Department of Agriculture

Should an audit be considered necessary after rejection by a Department of Agriculture officer, the following details will be investigated:

a) Exporter/delegate inspection records;
b) Grower pest monitoring records and pest control diaries (commodity specific);
c) Packer training and associated pest identification;
d) General hygiene of premises;
e) Segregation and identification of produce;
f) Staff responsibilities;
g) Exporter or exporter's delegate inspection procedures and pest/weed identification skills.

Should auditing fail to identify any breach of the NZ BQA and responsibility of the SOM, all parties will be reinstated.

Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the Export Manager who will co-ordinate necessary action and advise all parties at the earliest opportunity.

Copies of any audit will be given to the relevant components of the pathway audited and kept on file.

Inspectors undertaking these audits must be appropriately trained and accredited.

Table 9 DEPARTMENT OF AGRICULTURE AUDIT FREQUENCY

	Initial Year of registration	Continuous Registration	Winter Window
Grower	Initial audit prior to export + One additional audit during export period within calendar year	One audit early in new export period (no initial audit required)	Monthly audits of property & spray diaries * Audits extended to 2 monthly if substantial compliance is shown
Packer	Initial audit prior to export + One additional audit during calendar year	Minimum one audit annually	
Treatment Centre	Monthly audits required in first year Dimethoate - One initial audit during the first 10 days of season + monthly audits for remainder of calendar year whilst conducting treatments Irradiation – One intial audit during the first 10 days of season + two audits for remainder of calendar year	Fumigation - One annual audit in first 10 days of export period (to be conducted during a treatment) + 2-3 times during remainder of treatment period within calendar year Cold Storage – One annual during first 3 treatments Dimethoate – Two audits per calendar year if substantial compliance is shown Irradiation – Two audits per calendar year if substantial compliance is shown	
Exporter Delegate	Initial audit prior to export + One additional audit during remainder of calendar year	Minimum two audits per year If fail at two Department of Agriculture end point inspections, immediate audit required	
Exporter	One audit Annually	One audit Annually	
Crop monitor	One Audit Annually	One audit Annually	

8.4 Fruit fly area freedom – State Departments

State Departments are responsible for the following:

a) Where required, ensure the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual state management plans (as submitted to MPI), the *Code of Practice for the Management of Queensland Fruit Fly*, and the requirements of MPI Biosecurity Authority Standards 158.03.06 and 158.03.07; and
b) Report any detections of economically significant fruit fly species found within trapping grids to the Department of Agriculture Canberra Office within 24 hours of identification.

8.4.1 Validation of area freedom

The following procedures are undertaken to validate area freedom:

a) Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. The procedures and controls are documented such that they can be readily demonstrated to, and audited by the Department of Agriculture Canberra Office and MPI to meet the stipulated Australian and New Zealand Standards;
b) Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times;
c) Trapping and monitoring programs as recommended in the *Code of Practice for the Management of Queensland Fruit Fly* and managed under the tri-state agreement between the states of New South Wales, Victoria and South Australia and;
d) Reflect the requirements of New Zealand MPI Biosecurity Authority Standard 158.03.06., the Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or;
e) Management and control procedures for each area which have been accepted by MPI as meeting all the requirements (or equivalence) with the MPI Biosecurity Authority Standard 158.03.06;
f) State Departments must advise the Department of Agriculture Canberra Office of any amendments to their management procedures at the earliest opportunity. Canberra Office will forward amendments to MPI. Canberra will audit the management practices for fruit fly trapping on a regular basis (minimum annually), against the current copy of the State Department procedures documents, the *Code of Practice for the Management of Queensland Fruit Fly* and where applicable MPI Biosecurity Authority Standard 158.03.06.

8.4.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom has been approved) must be performed as detailed in the *Code of Practice for the Management of Queensland Fruit Fly*.

The servicing and inspection frequency will be as directed in the *Code of Practice for the Management of Queensland Fruit Fly*.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

ATTACHMENT 1 NEW ZEALAND PEST LISTS

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under Appendices 2 (Area Freedom) and 5 (cold storage disinfestation) to the NZ BQA.

Growers and packhouse must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be implemented for the Risk group 2 pests *Pseudocercospora purpurea* (cercospora spot blotch (CSB)) and sun blotch viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600-unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale

Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders’ case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite

Fungus

Ascomycota
Phyllachorales
Phyllachoraceae
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*) anthracnose
Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	
Epiphyas postvittana	light brown apple moth
Thysanoptera	

Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	two-spotted spider mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi)*	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea)*	ear rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	

Non-regulated non plant pests/organisms

None

BANANA

Musa spp.

Bananas can be exported to New Zealand under Appendix No. 6 – Non Host Status of the NZ BQA when harvested in the unripe 'mature green' stage of maturity.

Growers and packhouses need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a regulated pest until official categorisation has been determined by the Department of Agriculture/MPI.

***Maconellicoccus hirsutus* (pink hibiscus mealybug) is listed for bananas, and the Department of Agriculture can certify freedom from this pest based on the following:**

Maconellicoccus hirsutus

1. In field controls for *Maconellicoccus hirsutus* species are a requirement of grower registration, as such pink hibiscus mealybug will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Maconellicoccus hirsutus* fruit will be fumigated with methyl bromide (at appropriate rates) prior to export.

3. Pre-export inspection of fruit will identify the presence of *M. hirsutus,* and the fruit would be rejected for export to New Zealand.

Regulated quarantine pests (actionable)

Pest Scientific Name	Common Name
Cercospora hayi	diamond spot
Chaetothyrina musarum	sooty blotch
Cladosporium spp.	cladosporium mould
Glomerella cingulata var. *minor (*anamorph *Collectotrichum gloeosporioides* var. *minor)*	anthracnose
*Guignardia musae (*anamorph *Phyllosticta musarum)*	freckle
Phytophthora palmivora	black rot
Ramichloridium musae	freckle
Aleurodicus dispersus	spiralling whitefly
Amblypelta lutescens	fruit spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Araecerus coffeae	coffee bean weevil
Aspidiotus destructor	coconut scale
Atherigona orientalis	muscid fly
Bactrocera bryoniae	**fruit fly #**
Bactrocera musae	**banana fruit fly #**

Bactrocera cucumis	**cucumber fruit fly #**
Bactrocera frauenfeldi	**fruit fly #**
Bactrocera jarvisi	**Jarvis's fruit fly #**
Bactrocera neohumeralis	**lesser Queensland fruit fly #**
Bactrocera tryoni	**Queensland fruit fly #**
Ceratitis capitata	**Mediterranean fruit fly** #
Chaetanaphothrips signipennis	banana rust thrips
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Cnaphalocrocis medinalis	rice leaf folder
Dirioxa pornia	Island fruit fly
Dysmicoccus brevipes	pineapple mealybug
Elixothrips brevisetis	banana rind thrips
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Ferrisia virgata	striped mealybug
Geloptera miracula	chyrsomelid beetle
Haplothrips gowdeyi	black flower thrips
Helicoverpa assulta	cape gooseberry budworm
Hemiberlesia palmae	citrus black scale
Icerya aegyptiaca	Eygyptian fluted scale
Icerya seychellarum	Seychelles scale
Isotenes miserana	orange fruit borer
Leptoglossus gonagra	squash bug
Maconellicoccus hirsutus	pink hibiscus mealybug #
Melanitis leda ismene	Rice butterfly
Monolepta australis	red-shouldered leaf beetle
Opogona glycyphaga	sugar-cane bud moth
Orgyia australis	vapourer moth
Pentalonia nigronervosa	banana aphid
Pinnaspis strachani	hibiscus snow scale
Planococcus citri	citrus mealy bug
Planococcus minor	passionvine mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rhyparida discopunctulata	leaf beetle
Spodoptera exigua	beet armyworm
Thrips florum	flower thrips
Thrips hawaiiensis	banana flower thrips
Tiracola plagiata	banana fruit caterpillar
Tirathaba rufivena	fruit borer
Unaspis citri	citrus snow scale
Xenothictis sciaphila	tortricid
Brevipalpus lewisi	bunch mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	vegetable spider mite

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Erwinia carotovora	bacterial soft rot
Aspergillus flavus	aspergillus storage rot
Aspergillus niger	aspergillus rot
*Ceratocystis paradoxa (*anamorph *Thielaviopsis paradoxa)*	ceratocystis rot
Colletotrichum musae	anthracnose
Deightoniella torulosa	black tip
Fusarium pallidoroseum	fusarium rot
*Glomerella cingulata (*anamorph *Colletotrichum gloeosporioides)*	anthracnose
Lasiodiplodia theobromae	fruit and stem-end rot
*Magnaporthe grisea (*anamorph *Pyricularia grisea)*	Johnson's spot
Sclerotinia sclerotiorum	cottony rot
Agrotis ipsilon	greasy cutworm
Aonidiella aurantii	California red scale
Aphis gossypii	cotton aphid
Araecerus fasciculatus	coffee bean weevil
Aspidiotus nerii	oleander scale
Chrysodeixis eriosoma	green garden looper
Coccus hesperidum	brown soft scale
Hemiberlesia cyanophylli	cyanophyllum scale
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Hercinothrips bicinctus	banana silvering thrips
Hermetia illucens	black soldier fly
Listroderes difficilis	vegetable weevil
Pseudococcus longispinus	longtail mealybug
Rhopalosiphum maidis	corn leaf aphid
Spodoptera litura	cluster caterpillar
Brevipalpus californicus	bunch mite
Polyphagotarsonemus latus	broad mite
Tetranychus lambi	strawberry spider mite
Tetranychus urticae	twospotted spider mite

Denotes high impact pest

CAPSICUM

Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendix 3 (fumigation) and Appendix 10 (field control programs) NZ BQA/IHS**
- **Appendix 12 (irradiation) to the NZ BQA/IHS**

A number of Risk group 2 pests are listed for capsicums, and the Department of Agriculture can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during Department of Agriculture pre-export inspection.
5. Irradiation at 150 Gy is determined to be effective for all fruit flies.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *B. musae* has never been detected on capsicum fruit during Department of Agriculture pre-export inspection.
4. Irradiation at 150 Gy is determined to be effective for all fruit flies.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on capsicum fruit during Department of Agriculture pre-export inspection.

***Conogethes punctiferalis* (yellow peach moth)**

1. Irradiation at 250 Gy is determined to be effective for *C. punctiferalis*.
2. Irradiation at 150 Gy is permitted where effective in-field controls have been undertaken for *C. punctiferalis*. Methyl bromide at appropriate rates (prior to export) is also an effective treatment for Lepidopteran spp.

Thrips palmi [vect]

1.	Pre-export inspection of fruit will identify the presence of *Thrips palmi* and the fruit would be rejected for export to New Zealand, or treated with methyl bromide.
2.	Historical records show that *Thrips palmi* has never been detected on capsicum fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera bryoniae	fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
Bactrocera kraussi	fruit fly
Bactrocera jarvisi	Jarvis's fruit fly
Bactrocera musae	Banana fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci [vect.]	
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	melon thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample.

Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Cicadellidae	
Orosius argentatus [vect.]	common brown leafhopper
Orosius orientalis [vect.]	common brown leafhopper
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aleyrodidae	
Aleurodicus disperses	spiralling whitefly
Trialeurodes vaporariorum [strain]	greenhouse whitefly
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Coccidae	
Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale
Diaspididae	
Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	

Frankliniella schultzei [vect.]	tomato thrips
Scirtothrips dorsalis [vect.]	chilli thrips

Mite

Arachnida
Acarina
Tetranychidae

Eutetranychus orientalis	pear leaf blister mite

Fungus

Ascomycota
Hypocreales
Hypocreaceae

Nectria haematococca var. brevicona	dry rot

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae

Alternaria alternata f. sp. *lycopersici*	
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot

Tuberculariales
Tuberculariaceae

Fusarium oxysporum f. sp. vasinfectum	fusarium wilt

Pythiales
Pythiaceae

Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak

Virus

capsicum chlorosis virus (CaCV)
potato spindle tuber viroid (PSTVd)
tobacco leaf curl bigeminivirus [VO]
tomato torrado virus (ToTV)
tomato yellow leaf curl virus (TYLCV)

Phytoplasmas

Tomato big bud phytoplasma (TBB)

Weed

Angiospermae
Asterales
Asteraceae

Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf

Xanthium spp. (except X. spinosum)	bur
Caryophyllales	
Amaranthaceae	
Amaranthus spp.	amaranthus
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except C. ciliaris)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x almum	Columbus grass
Solanales	
Solanaceae	
Lycium spp. *(except L. barbarum, L. ferocissimum)*	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes costirostris	vegetable weevil
Listroderes difficilis	vegetable weevil
Listroderes obliquus	vegetable weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	

Bemisia argentifolii	poinsettia whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Myzus persicae	green peach aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Pyralidae	
Sceliodes cordalis	poroporo fruit borer
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculops lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli)*	phomopsis stem rot
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	

Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	
Sclerotinia sclerotiorum	cottony rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phoma destructiva	bulb rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	

Verticillium dahliae	verticillium wilt
Tubercularials	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. parasitica	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew

Bacterium

Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	
Agrobacterium tumefaciens	crown gall

Virus

Tobacco ringspot nepovirus (TRSV)
Tomato spotted wilt virus (TSWV)

Weed

Angiospermae	
Asterales	
Asteraceae	
Galinsoga parviflora	
Sonchus spp.	sowthistle
Poales	
Poaceae	
Echinochloa spp.	grasses
Eleusine indica	goose grass
Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis (orange), C. reticulata (mandarin/tangerine), C. paradisi (grapefruit), C. limon (lemon), C. reticulata x C. paradisi (tangelo) and C. aurantiifolia (lime)

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The pest citrus leaf miner, whilst listed as a Risk group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis's fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insect	
Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*)	

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta brevicornis	fruit-spotting bug

Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Eudocima salaminia	fruit-piercing moth

Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders's case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Sphingidae	
Agrius convolvuli	sweet potato hornworm

Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non-plant pests/organisms

None

CUCUMBER

Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 11 (winter window) and Appendix 10 (field control program).**

Note: Appendix 10 and Appendix 11 are only acceptable between 1 May and 1 September.

A number of Risk group 2 pests have been listed for cucumbers. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on cucumber fruit during Department of Agriculture pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 1, 2 and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. Pre-export inspections of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
2. Historical records show that *T. palmi* has never been detected on cucumber fruit during Department of Agriculture pre-export inspection.

Note: item 1 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that item 2 provides an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the NZ BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	melon thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	

Curculionidae	
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	
Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite

Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota
- **Unknown Ascomycota**
  - **Hyponectriaceae**
    - *Monographella cucumerina* (anamorph *Microdochium tabacinum*)

Mitosporic Fungi (Hyphomycetes)
- **Hyphomycetales**
  - **Dematiaceae**
    - *Cladosporium cucumerinum*
  - **Moniliaceae**
    - *Verticillium albo-atrum* [severe strain] — progressive wilt
- **Tuberculariales**
  - **Tuberculariaceae**
    - *Fusarium oxysporum* f. sp. *melonis*

Oomycota
- **Pythiales**
  - **Pythiaceae**
    - *Pythium aphanidermatum* — cottony leak
    - *Pythium mamillatum* — root rot
    - *Pythium myriotylum* — rhizome and root rot

Zygomycota: Zygomycetes
- **Mucorales**
  - **Choanephoraceae**
    - *Choanephora cucurbitarum* — blight

Virus

Regulated non-quarantine pests

None

Regulated non plant pests

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name

Insect

Insecta
- **Coleoptera**

Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes difficilis	vegetable weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	white fringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora cowpea	aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Franklinella occidentalis	Western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips tabaci	onion thrips

Mite

Arachnida
Acarina

Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	

Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	
Septoria cucurbitacearum	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum dry rot	
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Zygomycota: Zygomycetes	

Mucorales
Mucoraceae

Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot

Bacterium
Enterobacteriaceae

Erwinia carotovora subsp. carotovora	bacterial soft rot

Pseudomonadaceae

Pseudomonas syringae pv. lachrymans	angular leaf spot
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Viruses

Tobacco ringspot nepovirus (TRSV)
Tobacco spotted wilt virus (TSWV)

Non-regulated non plant pests

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of sulphur dioxide and carbon dioxide fumigation for redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Growers and packhouse must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk group 2 pests *Conogethes punctiferalis* (yellow peach moth). The Department of Agriculture will be certifying Southern State grapes area free for the Risk group 2 pest *Maconellicoccus hirsutus* (pink hibiscus mealybug).

Regulated pests (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name

Insect

Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth
Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	

Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except E. postvittana)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips

Mite

Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite

Mollusc

Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail

Fungus

Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	
Coniella diplodiella	white rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria vitis	leaf disease
Cladosporium viticola	cladosporium leaf spot

Weed

Angiospermae	
Asterales	
Asteraceae	
Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed

Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except X. *spinosum*) [contaminant]	bur

Geraniales

Zygophyllaceae

Tribulus terrestris [contaminant]	caltrop

Poales

Poaceae

Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass

Solanales

Solanaceae

Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida

Araneae

Theridiidae

Latrodectus hasselti	Australian red-back spider

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name

Insect

Insecta

Coleoptera

Curculionidae

Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida
Acarina
Tarsonemidae

Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Tetranychidae	
Panonychus ulmi	European red mite
Tetranychus urticae	two-spotted spider mite

Mollusc

Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail

Fungus

Ascomycota	
Diatrypales	
Diatrypaceae	
Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker
Elsinoaceae	
Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose
Mycosphaerellaceae	
Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot

Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot

Weed

Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	
Digitaria violascens [contaminant]	
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass
Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	
Pennisetum macrourum [contaminant]	African feather grass
Solanales	
Solanaceae	
Lycium barbarum [contaminant]	boxthorn
Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

LYCHEE

Litchi chinensis

Lychees can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by Department of Agriculture/MPI.

Regulated Pest List Commodity Sub-class: Fresh Fruit/Vegetables *Litchi chinensis* from Australia

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Amblypelta lutescens	banana spotting scale
Amblypelta nitida	fruit spotting scale
Bactrocera jarvisi	Jarvis's fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceroplastes rubens	pink/red wax scale
Cryptophlebia ombrodelta	Seychelles scale
Ischnaspis longirostris	black thread scale
Nysius vinitor	Rutherglen bug
Bipolaris hawaiiensis	fungi
Pestalotiopsis sp.	fungi

MANGO
Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated quarantine pests (actionable)

Pest Scientific Name	Common Name
Bactrocera aquilonis	Northern Territoty fruit fly
Bactrocera cucumis	cucumber fruit Fly
Bactrocera frauenfeldi	fruit fly
Bactrocera jarvisi	Jarvis's fruit fly
Bactrocera kraussi	fruit fly
Bactrocera murrayi	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera opiliae	false Oriental Fruit Fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly
Dirioxa pornia	Island fruit fly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	yellow peach moth
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Frankliniella schultzei	flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Helopeltis clavifer	
Icerya aegyptiaca	Egyptian fluted scale
Idioscopus clypealis	mango hopper
Idioscopus nitidulus	mango hopper
Ischnaspis longirostris	black thread scale
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Monolepta australis	red-shouldered leaf beetle

Monolepta divisa	small monolepta beetle
Nipaecoccus vastator	karoo thorn mealybug
Ophiusa tirhaca	
Penicillaria jocosatrix	mango tipborer
Phenacaspis dilatata	mango scale
Planococcus citri	Citrus mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rastrococcus sp.	
Rhyparida limbatipennis	
Saissetia miranda	Mexican black scale
Selenothrips rubrocinctus	redbanded thrips
Sternochetus mangiferae	mango seed weevil
Asterina punctiformis	
Chaetothyrina tenuissima	stem sooty blotch
Cytosphaera mangiferae	stem-end rot
Elsinoe mangiferae (anamorph *Sphaceloma mangiferae*)	mango scab
Fusicoccum mangiferae	
Nattrassia mangiferae	stem-end rot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangifolia	storage rot
Pestalotiopsis theae	mango blight
Pestalotiopsis virgatula	mango leaf spot
Phomopsis mangiferae	stem end rot
Pythium mangifera	mango powdery mildew
Schizoparme straminea (anamorph *Coniella*	schizoparme fruit rot

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Aonidiella aurantii	California red scale
Ceroplastes destructor	white wax scale
Epiphyas postvittana	light brown apple moth
Helicoverpa armigera	tomato fruitworm
Heliothrips haemorrhoidalis	greenhouse thrips
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Icerya purchasi	cottony cushion scale
Parasaissetia nigra	nigra scale
Pseudococcus longispinus	long tailed mealybug
Saissetia coffeae	helmet scale
Toxoptera aurantii	black citrus aphid
Toxoptera citricida	brown citrus aphid
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	two-spotted spider mite
Alternaria alternata	black stalk rot

Botryosphaeria dothidea (anamorph Fusicoccum aesculi)	canker
Botryosphaeria parva (anamorph Fusicoccum parvum)	canker
Botryosphaeria rhodina	gummosis
Botryosphaeria ribis (anamorph Lasiodiplodia theobromae)	canker
Botryotinia fuckeliana (anamorph Botrytis cinerea)	grey mould
Cladosporium cladosporioides	cladosporium leaf spot
Cochliobolus hawaiiensis	leaf spot, seed rot
Colletotrichum acutatum	anthracnose
Colletotrichum coccodes	anthracnose
Dipodascus Geotrichum (anamorph Geotrichum candidum)	sour rot
Dothiorella aromatica	stem-end rot
Epicoccum purpurascens	black mould
Erysiphe cichoracearum (anamorph Oidium asterispunicei)	powdery mildew
Fusicoccum luteum	bunch rot
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	anthracnose
Glomerella lagenaria (anamorph Colletotrichum orbiculare)	
Pestalotiopsis funereal	leaf spot
Pestalotiopsis versicolor	pestalotiopsis rot
Phytophthora nicotianae	buckeye rot
Pithomyces chartarum	facial eczema fungus
Pleospora allii (anamorph Stemphylium vesicarium)	black mould
Rhizopus stolonifer	rhizopus soft rot
Thanatephorus cucumeris (anamorph Rhizoctonia solani)	rhizoctonia rot

MELON

Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 2 and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Pest Scientific Name	Common Name

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Insect

Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect

Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	melon thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28 Spotted ladybird
Henosepilachna suffusa	
Curculionidae	
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutes	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Myzus persicae [vect.]	green peach aphid
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	
Spodoptera exigua	beet armyworm
Pyralidae	

Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	
Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	
Fusarium oxysporum f. sp. *melonis*	
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Bacterium

Pseudomonadaceae	
Acidovorax avenae subsp. *Citrulli*	bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	white fringed weevil
Listroderes difficilis	vegetable weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	

Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia lateens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana	
(anamorph *Cladosporium herbarum)*	black leaf spot
Unknown Dothideales	
Didymella bryoniae	
(anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum	
(anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata	
(anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea	
(anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata	
(anamorph *Fusarium lateritium*)	fusarium rot
Gibberella intricans	
(anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca	
(anamorph *Fusarium solani*)	fusarium fruit rot

Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	
(anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria	
(anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	
(anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	
(anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii	
(anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. intermedium	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium solani f. sp. *cucurbitae*	
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	

Mucorales
Mucoraceae

Rhizopus stolonifer	rhizopus soft rot

Bacterium

Pseudomonadaceae

Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. lachrymans	angular leaf spot
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Virus

tobacco ringspot nepovirus [TRSV]

Non-regulated non plant pests

None

PAPAYA

Carica papaya

Papaya can be exported to New Zealand under Appendix No. 12 - Irradiation of the NZ BQA.

Growers and packhouse choosing 250 Gray (Gy) irradiation for papaya do not need to be specifically registered for the New Zealand export program.

Growers and packhouse choosing 150 Gy irradiation and in-field controls for papaya need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

***Conogethes punctiferalis* (yellow peach moth) is listed for papaya, and the Department of Agriculture can certify freedom from this pest based on the following:**

Conogethes punctiferalis

1. If infield controls for *Conogethes punctiferalis* are carried out, fruit will be irradiated at 150 Gy prior to export.

2. Where irradiation is chosen as the pest control activity for *Conogethes punctiferalis* a minimum dose of 250 Gy must be applied prior to export. This treatment will be considered to be a generic treatment for all regulated arthropod pests on the Australian papaya pest list, listed below.

Regulated quarantine pests (actionable)

Pest Scientific Name	Common Name
Asperisporium caricae	black spot
Phomopsis caricae-papayae	wet fruit rot
Phytopthora capsici	buckeye rot
Phytopthora palmivora	black rot
Bactrocera cucumis	**cucumber fruit fly #**
Bactrocera frauenfeldi	**fruit fly #**
Bactrocera jarvisi	**Jarvis's fruit fly #**
Bactrocera musae	**banana fruit fly #**
Bactrocera neohumeralis	**lesser Queensland fruit fly #**
Bactrocera tryoni	**Queensland fruit fly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Dirioxa pornia	island fruit fly
Aleurodicus dispersus	spiraling whitefly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Carpophillis maculatus	dried fruit beetle
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	**yellow peach moth #**

Eucalymnatus tessellatus	tessellated scale
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Ferrisia virgata	striped mealybug
Pericyma cruegeri	poinciana looper
Pseudaulacaspis cockerelli	Cockerell's scale
Papaya ringspot virus (type P strain)	PRSV-Type P

Non-regulated pests (non-actionable)

Pest Scientific Name	**Common Name**
Brevipalpus phoenicis	passion vine mite
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria rhodina (anamorph *Lasiodiplodia theobromae*)	gummosis
Botryosphaeria ribis	canker
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum dematium	anthracnose
Corynespora cassicola	leaf spot
Erysiphe cruciferarum	powdery mildew
Fusarium pallidoroseum	fruit core rot
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	anthracnose
Leveillula taurica	powdery mildew
Mycosphaerella caricae *(anamorph Phoma caricae-papayae)*	leaf spot
Phytophthora nicotianae	buckeye rot
Rhizopus stolonifer	rhizopus soft rot
Aphis spiraecola	spirae aphid

Denotes high impact pest

PINEAPPLE

Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the NZ BQA/IHS, based on non-host status for the variety 'Smooth Cayenne' or approved varieties that are genetically ≥ 50 per cent 'Smooth Cayenne'.

Approved varieties of pineapple covered by this treatment appendix are:

- '**Smooth Cayenne**'
- '**Aus-Jubilee**'
- '**MD-2**' **(also known as '73-114')**
- '**73-50**' **(also known as 'CO-2')**

Growers and packhouse do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	

Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla	
Unknown Symphyla	
Symphylidae	
Hanseniella sp.	symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)

Hyphomycetes
Dematiaceae
Thielaviopsis paradoxa
Moniliaceae
Penicillium funiculosum

Bacterium

Enterobacteriaceae	
Erwinia ananas	marbling of fruit

Virus

mealybug wilt closterovirus

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect
Insecta
Hymenoptera
Formicidae

Iridomyrmex glaber	black house ant
Paratrechina vaga	ant
Tapinoma sp.	ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin’s flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	

Thripidae	
Thrips tabaci	onion thirps

Mite

Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite

Nematode

Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode

Fungus

Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora cinnamomi	
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus

tomato spotted wilt tospovirus (TSWV)

Non-regulated non-plant pests/organisms

Pest Scientific Name	Common Name
Insect	
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

PUMPKIN

Cucurbitae pepo (Note*: C. moschata* is not permitted)

Pumpkins (*C. pepo*) can be exported to New Zealand under the following appendicies.

- **Appendix 2 – (fruit fly Area Freedom)**

A number of Risk group 2 pests have been listed for pumpkins (*C. pepo*). The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on pumpkin fruit during Department of Agriculture pre-export inspection.

Tetranychus kanzawai

1. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
2. Historical records show that *T. kanzawai* has never been detected on pumpkin fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Bemisia tabaci	sweet potato whitefly
Tetranychus kanzawa	kanzawa mite

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name

Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Aphis gossypii [vect.]	cotton aphid
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp.	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite

Tomato big bud phytoplasma
Tobacco ringspot nepovirus [strain] [VO]

Non-regulated pests (non-actionable)

Pest Scientific Name	Common Name
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	white-fringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph	cucumber stem rot
Phoma cucurbitacearum)	
*Dipodascus geotrichum (*anamorph	sour rot
Geotrichum candidum)	
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
*Erysiphe cichoracearum (*anamorph	powdery mildew
Oidium asteris-punicei)	
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	
*Gibberella acuminata (*anamorph	fusarium storage rot
Fusarium acuminatum)	
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker

*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

STRAWBERRY

Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil

Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French’s cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller’s rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil

Listroderes difficilis	vegetable weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite

Myriapod

Diplopode	
Julida	
Blaniulidae	
Blaniulua guttulatus	spotted snake millipede

Mollusc

Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Limacidae	
Deroceras panormitanum	brown field slug

Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO

Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendix 12 (irradiation) to the NZ BQA/IHS**

A number of Risk group 2 pests have been listed for tomatoes. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on tomato fruit during Department of Agriculture pre-export inspection.

Thrips palmi

1. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand, or treated with methyl bromide.
2. Historical records show that *T. palmi* has never been detected on tomato fruit during Department of Agriculture pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on tomato fruit during Department of Agriculture pre-export inspection.
5. Irradiation at 150 Gy is deemed effective against all fruit flies.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name **Common Name**

Insect

Insecta
Diptera
Tephritidae

Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect

Insecta
Diptera
Tephritidae

Bactrocera musae	banana fruit fly

Homoptera
Aleyrodidae

Bemisia tabaci [vect.]	sweet potato whitefly

Thysanoptera
Thripidae

Thrips palmi [vect.]	melon thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta
Tenebrionidae

Gonocephalum carpentariae	false wireworm

Diptera
Lonchaeidae

Lamprolonchaea brouniana	metallic-green tomato fly

Muscidae

Atherigona orientalis	muscid fly

Tephritidae

Dirioxa pornia	island fruit fly

Hemiptera
Aleyrodidae

Trialeurodes vaporariorum [vect.]	greenhouse whitefly

Cicadellidae

Orosius argentatus [vect.]	common brown leafhopper
Orosius orientalis [vect.]	common brown leafhopper

Coreidae

Fabrictilis australis	squash bug

Lygaeidae

Nysius vinitor	Rutherglen bug

Pentatomidae

Plautia affinis	green stink bug

Pyrrhocoridae

Dindymus versicolor	harlequin bug

Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm
Thysanoptera	
Thripidae	
Frankliniella schultzei [vect.]	tomato thrips
Scirtothrips dorsalis [vect.]	chilli thrips

Fungus

Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak

Virus

capsicum chlorosis virus (CaCV)
potato spindle tuber viroid (PSTVd)
tomato torrado virus (ToTV)
tomato yellow leafcurl virus (TYLCV)

Phytoplasma

tomato big bud phytoplasma (TBB)

Regulated non-quarantine pests

None

Regulated non plant pests

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name

Insect

Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Listroderes difficilis	vegetable weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Zygomycota: Zygomycetes	
Mucorales	

Mucoraceae

Rhizopus stolonifer	rhizopus soft rot

Virus

Tobacco ringspot nepovirus (TRSV)
Tomato spotted wilt virus (TSWV)

Non-regulated non plant pests

None

WATERMELON

Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk group 2 pests have been listed for watermelons. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the NZ BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai*.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	melon thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	

Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Ascochyta spp.
Phomopsis cucurbitae
Oomycota
Pythiales
Pythiaceae

Pythium spp.	pythium rot

Bacterium

Enterobacteriaceae

Erwinia tracheiphila	bacterial wilt

Pseudomonadaceae

Acidovorax avenae subsp. citrulli	bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta
Hymenoptera
Formicidae

Solenopsis geminata	fire ant

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name

Insect

Insecta
Coleoptera
Curculionidae

Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil

Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite

Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Leptosphaerulina trifolii	seed rot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phoma exigua	phoma rot
Septoria cucurbitacearum	
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	
Moniliaceae	
Verticillium dahliae	verticillium wilt

Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew

Bacterium

Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI

Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk group 2 pests have been listed for zucchinis and scallopinis. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arouse where *B. tabaci* was found to be damaging crops, applications of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on zucchini fruit during Department of Agriculture pre-export inspection.

Tetranychus kanzawai

1. Monitoring, and where applicable, application of chemicals (registered for use against *Tetranychus* spp.) would provide the necessary control of this pest.
2. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. kanzawai* has never been detected on zuvvhini fruit during Department of Agriculture pre-export inspection.

Thrips palmi* (zucchini only*)

1. Monitoring, and where applicable, application of chemicals (registered for use against *Thrips palmi*) would provide the necessary control of this pest.
2. Pre-export inspection of fruit would identify the presence of *Thrips palmi*, and the fruit would be rejected for export to New Zealand, or treated with methyl bromide.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Bactrocera cucumis	cucumber fruit fly #
Bemisia tabaci	sweet potato whitefly #
Ceratitis capitata	Mediterranean fruit fly #
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips palmi	melon thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite
Tetranychus kanzawai	**kanzawa mite #**
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Tyrophagus dimidiatus	mushroom mite

Tomato big bud phytoplasma

Non-regulated pests (non-actionable)

Pest Scientific Name	Common Name
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Epilachna vigintioctopunctata	28-spot ladybird
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	whitefringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Thrips tabaci	onion thrips
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph *Phoma cucurbitacearum)*	cucumber stem rot
*Dipodascus geotrichum (*anamorph *Geotrichum candidum)*	sour rot
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
*Erysiphe cichoracearum (*anamorph *Oidium asteris-punicei)*	powdery mildew

Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	
*Gibberella acuminata (*anamorph *Fusarium acuminatum)*	fusarium storage rot
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker
*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani)*	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

Tobacco ringspot nepovirus (TRSV)

 # Denotes high impact pest

ATTACHMENT 2 FORMS

2.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional Department of Agriculture office**			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
EMAIL ADDRESS			
POSTAL OR BUSINESS ADDRESS			
	POST CODE		
PROPERTY ADDRESS			
	POST CODE		
REAL PROPERTY DESCRIPTION (of area under planting – please attach detailed maps)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry for Primary Industries, New Zealand and the Australian Government Department of Agriculture.

I have read the Systems Operation Manual and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	
Pumpkin	Strawberries	Rockmelon	Honeydew melon
Cucumber	Scaloppini		

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.2 APPLICATION FOR REGISTRATION OF: PACKHOUSE / FREIGHT FORWARDER / LOAD OUT FACILITY / EXPORT INSPECTOR (DELEGATE)

Please post or fax this form to your local regional Department of Agriculture office		
NAME		
DEPARTMENT OF AGRICULTURE EXPORT ESTABLISHMENT NUMBER (if applicable)		
EMAIL ADDRESS		
POSTAL ADDRESS		
	POST CODE	
PREMISES ADDRESS		
	POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a (circle as appropriate) packer / freight forwarder / load out facility / delegated export inspector for (commodities)……..... for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry for Primary Industries, New Zealand and the Australian Government Department of Agriculture.

The following persons are hereby nominated as those responsible for upholding requirements within the SOM.

Name	**Responsibility** (circle as appropriate)
……	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……	Product Integrity / Load Out / Export Inspection

I have read the Systems Operation Manual as amended and agree to be bound by the conditions and restrictions contained therein as they apply to packhouses / freight forwarders / load out facilities / delegated export inspectors. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION

APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW **Please post or fax this form to your local regional Department of Agriculture office**			
NAME OF TREATMENT CENTRE			
DEPARTMENT OF AGRICULTURE EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
	POST CODE		
PREMISES ADDRESS			
	POST CODE		
DECLARATION I/We, ... hereby apply for registration as a treatment centre as required under the Bilateral Quarantine Arrangement made between the Ministry for Primary Industries, New Zealand and the Australian Government Department of Agriculture. I have read the Systems Operation Manual and agree to be bound by the conditions and restrictions contained therein as they apply to treatment centres. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.			
SIGNATURE		**DATE**	
WITNESS		**DATE**	
Treatment Type (please specify)			
Methyl Bromide Fumigation Cold Storage	Dimethoate Irradiation		

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the NZ BQA to perform field monitoring advisory services to growers registered by the Department of Agriculture for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the NZ BQA Systems Operation Manual as amended and have the ability to recognise and identify the regulated pest and weed seeds of concern to New Zealand.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to NZ BQA registered growers available to the Department of Agriculture/MPI for auditing purposes.

I/We agree to notify the Department of Agriculture immediately should any NZ BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the NZ BQA and the instructions contained in the Systems Operation Manual for NZ BQA.

Signature .....

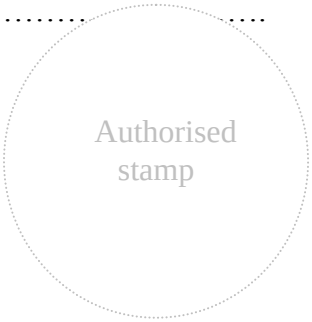
Printed Name ..... Date .....

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……



2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

Page 1 of 2

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Australian - New Zealand Bilateral Quarantine Arrangement and the NZ BQA Systems Operation Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, the Department of Agriculture must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the NZ BQA and the Systems Operation Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for NZ BQA commodities will provide properly identified inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection

The following parties and persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	Company	Commodity	Address
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Page 2 of 2

Treatment Supervision Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the NZ BQA for and on behalf of this Company.

Company	Commodity	Address
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Loading Supervisory Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of NZ BQA commodities as is required by the NZ BQA and the contents of this Manual.

Company	Commodity	Address
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the NZ BQA and the Systems Operation Manual as amended required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.6 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Tick

Date	Trade Description .....
Commodity	Commodity .....
No of Cartons	Registered Grower No. .....
Registered Grower No.	Registered Packing Establishment .....
	.....
Ex 28/RFP Number/s:	Australian Origin .....
.....	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250
Exporter/s	(Tick one) .....
	Exporter Inspection completed by:.....
	(a) Exporter
Inspector Name	(b) ED (name)
(Block Letters)	**Inspected by**:
.....	Grower Line .....
Inspector's Signature	Consignment Line .....

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NR**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed ☐ **Failed** ☐ **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Regulated Pest
****Please note, this is a template only: packhouse/ exporters are permitted to formulate their own copies of this template, provided all of the above information is contained. This form will be checked and approved at audit**

2.7 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	**Number of Cartons/Commodity**	**Temperatures Taken ***

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Department of Agriculture and the New Zealand Ministry for Primary Industries concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m³ with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX186 (i.e. transfer certificate) prior to shipment.

2.8 COLD DISINFESTATION RECORD

ON SHORE COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKHOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1 °C +/- 0 .6 °C.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

2.9 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by Department of Agriculture inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand should I/we wish to re-enter the Arrangement protocol at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in block letters Signature Date

....

Voluntary Withdrawal

I/we agree my/our property is no longer required to be registered under the terms and conditions required for the New Zealand export trade for NZ BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand should I/we wish to re-enter the Arrangement at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in Block letters Signature Date

....

DEPARTMENT OF AGRICULTURE DOCUMENTATION Authorised person
Fax / email to State Office Inspector's signature
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office) .....

2.10 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection/audit of the following property/premises:- (Grower – Packer – ED – Treatment Centre – Exporter – Freight Forwarder – Other ……) (select appropriate title)

Name .....
Address .....
.....
.....
Reg No .....

I believe for the following reasons that the entity outlined above no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) they (please indicate):

have no intention to correct the above mentioned deficiency in the immediate future

OR

are suspended until corrective action has been implemented and successful re-audit has been undertaken

I hereby declare the entity outlined above is suspended from Appendix …….. (all, 4, 10 etc) of the Australia - New Zealand NZ BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Representative Name	Representative Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

2.11 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY THE TRANSFER OF DIMETHOATE TREATED COMMODITIES

I, ...of .....……

.....……...

hereby declare that the ..... cartons of

……..tomatoes/capsicums/cucumbers/rockmelons/hodewdew melons/scallopinis (circle as

applicable) consigned to..... .....……...on

..... (date) were harvested from the following registered

blocks……..

…… AND

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute (tomatoes only).

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

3. further declare ..... (insert name of supervisor) a designated person nominated by..... (insert name of exporter) has supervised the loading of this consignment for transport to .....….....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....20.....

Signature ..... Witness .....

2.12 CONTAINER REPORT SHEET

CONDITION OF HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No. .....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28/RFP Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

2.13 AVOCADO GROWER DECLARATIONPORT SHEET

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

Australia – New Zealand Bilateral Quarantine Arrangement

Systems Operation Manual 6E

This Systems Operation Manual incorporates the New Zealand Import Health Standards for Australian fruit fly host material and the Department of Agriculture's operational requirements.

This manual is maintained and controlled by the Department of Agriculture Biosecurity Plant Division in Canberra.

Systems Operation Manual (SOM)

TABLE OF CONTENTS

AMENDMENT RECORD 6
GLOSSARY OF TERMS 7
DEFINITIONS 8
INTRODUCTION 9
SECTION 1 PEST CATEGORIES 10
1.1 Pest categories 10
1.1.1 Risk group 3 (RG3) pests 10
1.1.2 Risk group 2 (RG2) Pests 10
1.1.3 Risk group 1 (RG1) pests 10
1.1.4 Non regulated pests 11
1.1.5 Regulated pests 11
1.2 Maximum pest levels 11
1.3 Contaminants 11
SECTION 2 TREATMENT APPENDICES 13
2.1 Summary 13
2.2 Appendix 1 – Country freedom from fruit fly 26
2.3 Appendix 2 – Area freedom districts within Australia 26
2.3.1 General requirements 26
2.3.2 Approved area freedom districts 27
2.4 Appendix 3 – Fumigation 28
2.5 Appendix 4 – Dimethoate 29
2.6 Appendix 5 – Cold treatment 29
2.7 Appendix 6 – Non host 29
2.8 Appendix 7 – Heat treatments 29
2.9 Appendix 8 – Not currently in use 29
2.10 Appendix 9 – Not currently in use 29
2.11 Appendix 10 – Field control programs 29
2.12 Appendix 11 – Winter window 30
2.13 Appendix 12 – Irradiation 30
SECTION 3 GROWER RESPONSIBILITIES 32
3.1 Summary 32
3.2 General requirements 33
3.3 Registration 33
3.4 Orchard responsibilities 34
3.4.1 Citrus growers 34
3.4.2 Avocado growers 34
3.5 Audits 35
3.5.1 Non Compliance 36
3.5.2 Packhouse Approved Arrangement systems 36
3.5.3 Security and supervision 36
SECTION 4 CROP MONITOR RESPONSIBILITIES 37
4.1 Registration 37
4.2 Audit 37
4.3 Non compliance 37
SECTION 5 PACKHOUSE RESPONSIBILITIES 38
5.1 General requirements 38
5.2 Documentation 38

5.3 Delegation of exporter responsibilities 38
5.3.1 General 38
5.3.2 Security and supervision 39
5.3.3 Inspection 39
5.4 Audit 39
5.4.1 Non compliance 40
5.5 Approved Arrangements – Packhouse 40
5.5.1 General requirements 40
5.5.2 Audit 41
5.5.3 Inspection requirements 41
5.5.4 Documentation 42
5.5.5 Post treatment security 43
SECTION 6 TREATMENT CENTRE RESPONSIBILITIES 44
6.1 General requirements 44
6.2 Registration 44
6.3 Audit 44
6.3.1 Non compliance 44
6.4 Post treatment security 44
6.4.1 Registration 44
6.4.2 General requirements 45
6.5 Post treatment transportation 45
6.6 Treatment Appendices 46
6.6.1 Appendix 3 – Fumigation 46
6.6.1.2 Department of Agriculture supervision 47
6.6.2 Appendix 4 – Dimethoate 48
6.6.2.1 General requirements 48
6.6.2.2 Waxed produce 49
6.6.2.3 Sampling 49
6.6.2.4 Department of Agriculture audit 49
6.6.3 Appendix 5 – Cold treatment 50
6.6.3.1 General requirements 50
6.6.3.2 Temperature recorders 51
6.6.3.3 Calibration of temperature sensors 51
6.6.3.4 Loading of containers 51
6.6.3.5 On-shore cold treatments 51
6.6.3.6 In-transit cold treatments 53
Attachment to section 6.6.3.6 55
6.6.4 Appendix 12 – Irradiation 56
6.6.4.1 Dosimetry 57
6.6.4.2 Dose Mapping 57
6.6.4.3 Facility records and traceability 57
6.7 Table grape fumigation requirements – Treatment for disinfestation of redback spiders - ***Latrodectus hasselti*** 58
6.7.1 General requirements 58
6.7.2 Treatment 58
6.7.3 Traceability 59
6.7.4 Additional precautionary measures 59
SECTION 7 EXPORTER RESPONSIBILITIES 60
7.1 General requirements 60
7.2 Exporter Inspection 61
7.2.1 Split consignment inspections 61

7.3 Documentation 62
7.4 Rejected produce 62
7.5 Security of produce 63
7.6 Audit 63
7.6.1 Non-compliance 63
SECTION 8 GOVERNMENT RESPONSIBILITIES 64
8.1 Department of Agriculture Horticulture Export Program structure 64
8.1.1 Director – Horticulture Export Program 64
8.2 Department of Agriculture Regional Offices 65
8.2.1 Registration requirements 66
8.2.2 Sampling requirements 66
8.2.3 Department of Agriculture inspection procedures 66
8.2.4 Consignment line samples 66
8.2.5 Rejection procedures 67
8.3 Audit 68
8.3.1 Audits after product rejections by the Department of Agriculture 68
8.4 Fruit fly area freedom – State Departments 70
8.4.1 Validation of area freedom 70
8.4.2 Trapping 71
ATTACHMENT 1 NEW ZEALAND PEST LISTS 72
AVOCADO 72
BANANA 77
CAPSICUM 80
CITRUS 89
CUCUMBER 95
GRAPE 103
LYCHEE 111
MANGO 112
MELON 115
PAPAYA 123
PINEAPPLE 125
PUMPKIN 129
STRAWBERRY 133
TOMATO 137
WATERMELON 143
ZUCCHINI & SCALLOPINI 150
ATTACHMENT 2 FORMS 154
2.1 APPLICATION FOR GROWER REGISTRATION 154
2.2 APPLICATION FOR REGISTRATION OF: PACKHOUSE / FREIGHT FORWARDER / LOAD OUT FACILITY / EXPORT INSPECTOR (DELEGATE) 155
2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION 156
2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES 157
2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT 158
2.6 INSPECTION RECORD 160
2.7 FUMIGATION RECORD 161
2.8 COLD DISINFESTATION RECORD 163
2.9 WITHDRAWAL NOTICE 164
2.10 SUSPENSION NOTICE 165
2.11 DECLARATION OF DIMETHOATE TREATMENT 166
2.12 CONTAINER REPORT SHEET 167

2.13 AVOCADO GROWER DECLARATIONPORT SHEET.....168
ATTACHMENT 3 ADDENDUM – TABLE GRAPES – IRRADIATION.....169

AMENDMENT RECORD

Amendments to this manual will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No.	Entered by:	Date
1	s. 22(1)(a)(ii)	18 June 1999
2		14 July 1999
3		27 April 2000
4		March 2001
5 5A 5B 5C		29 April 2002 March 2002 December 2004 January 2006
6 6A 6B 6C 6D 6E 6E (with addendum)		August 2006 August 2007 March 2011 May 2011 July 2013 April 2014 March 2019
7		
8		
9		
10		

GLOSSARY OF TERMS

ANVAS	Avocado Nursery Voluntary Accreditation Scheme
AA	Approved Arrangement
Dmin	The localized minimum absorbed dose within the process load
Dmax	The localized maximum absorbed dose within the process load
EXDOC	Department of Agriculture electronic export documentation system
EX28	Notice of Intention to Export/Export Permit
EX161	Inspection advice notice
EX186	Transfer Certificate
EX222	Approved Arrangement equivalent of EX28
ED	Exporter Delegate
Gray (Gy)	Unit of absorbed dose where 1 Gy is equivalent to the absorption of 1 joule per kilogram
IHS	Import Health Standards (New Zealand)
MeV	Mega Electron Volt
MAP	Maximum Allowable Prevalence
MICoR	Manual of Importing Country Requirements; Export conditions database
MPI	Ministry for Primary Industries (New Zealand)
NZ BQA	Australia-New Zealand Bilateral Quarantine Arrangement
RFP	Electronic Request for Permit
SOM	Systems Operation Manual (this document)

DEFINITIONS

Department of Agriculture Inspection	An inspection of any number of packages from one exporter from the same treatment pathway presented for inspection at one time.
Consignment line inspection	Inspection consists of commodities from a common treatment pathway. The inspection lot can be made up of different growers provided grower line inspections have been undertaken.
Grower line inspection	Inspection that must be performed prior to the Department of Agriculture inspection and consists of one grower, one commodity and one treatment pathway.
Maximum allowable prevalence	The level of infestation that is the threshold, above which phytosanitary actions based on inspection would be applied.
Phytosanitary certificate	A certificate issued in accordance with Article V of the International Plant Protection Convention or at the request of a foreign country authority.
Unit	An individual piece of produce, or, in the case of grapes (a bunch) or bananas (a hand).

INTRODUCTION

The Australia-New Zealand Bilateral Quarantine Arrangement (NZ BQA) is a formal agreement between the Australian Government Department of Agriculture and the New Zealand Ministry for Primary Industries (MPI), to ensure New Zealand's pre-export requirements are documented. This manual ensures all parties are aware of their responsibilities when exporting fruit fly host commodities to New Zealand.

The NZ BQA details a series of treatment appendices that describe the requirements for a particular treatment for fruit fly host material. The structure incorporates developments in relation to the documentation of New Zealand Import Health Standards (IHS) on a commodity-by-commodity basis.

Scope of the manual

This Systems Operation Manual (SOM) is designed to ensure:

a) Only approved fruit fly host commodities are exported to New Zealand;
b) Homogeneity of fruit fly host commodity consignments;
c) Approved treatments for fruit fly host produce are used;
d) Required levels and intensity of inspection of fruit fly host produce are maintained;
e) Post treatment security to eliminate cross contamination, reinfestation and potential substitution of legitimate export produce;
f) Trace back to grower/packer/treatment centre (as appropriate); and
g) Accurate phytosanitary certification in accordance with New Zealand requirements.

Department of Agriculture Regional Offices and State Departments of Agriculture (or equivalents) are to conduct management audits of the systems to ensure state responsibilities are being adequately performed and recorded.

This SOM gives instructions for audit procedures and maintenance of records that will be the responsibility of Department of Agriculture Regional Offices, and where applicable State Departments of Agriculture or their equivalents.

SECTION 1 PEST CATEGORIES

1.1 Pest categories

MPI have commenced the re-categorisation of pests as regulated and non-regulated pests. Certain regulated pests are deemed by MPI to be high impact pests which is divided into high impact fruit flies and high impact non fruit flies. High impact fruit fly categorisation is equivalent to the previous Risk group 3 (RG3) and high impact non fruit fly equivalent to Risk group 2 (RG2) pest categories.

As MPI review current IHSs, the existing risk categories of Risk group 1 (RG1), RG2 and RG3 will be transcribed into the new categories.

1.1.1 Risk group 3 (RG3) pests

Are pests which upon entry into New Zealand would cause major market access disruption for a wide range of New Zealand commodities and/or have significant effects on environment or agricultural production. This group includes species of economically significant fruit flies.

These pests require treatment to be undertaken in Australia with documented procedures to ensure Department of Agriculture phytosanitary certification is accurate and auditable by MPI.

If this level pest is detected in New Zealand then the consignment will be re-exported or destroyed and the treatment pathway suspended until such time as a Department of Agriculture audit is conducted, and any associated corrective action is undertaken and results accepted by MPI.

1.1.2 Risk group 2 (RG2) Pests

Are pests which upon entry into New Zealand could cause major market access disruption and/or have significant effects on environment or the agricultural production of a particular commodity.

These pests require some form of management practice to be undertaken (i.e. infield controls, area freedom, or post harvest treatments). An additional declaration to this effect must be made on the phytosanitary certificate.

If this level pest is detected in New Zealand the consignment will be re-exported, destroyed or where appropriate ordered for appropriate treatment. There will be no suspension of trade but a follow up Department of Agriculture audit will be conducted to determine cause of the system failure and associated corrective actions undertaken. The Department of Agriculture may suspend specific commodity pathway until cause of failure is determined and corrective action undertaken.

1.1.3 Risk group 1 (RG1) pests

RG1 pests are those pests which upon introduction into New Zealand could cause unacceptable economic impacts on the production of a commodity/commodities and/or the environment.

These pests require no specific formal treatment or controls, the Department of Agriculture will inspect for these pests at export inspection, if detected the consignment must be subjected to appropriate treatment/re-conditioning and represented for exporter/exporter delegate (ED) Department of Agriculture inspection.

If this level of pest is detected in New Zealand the consignment would be available to be re-conditioned, subject to appropriate treatment (if available), re-export or destroyed.

1.1.4 Non regulated pests

These pests have an unlimited tolerance during inspection and are regarded as non-actionable pests between Australia and New Zealand. It should be noted that excessive levels of non-regulated pests may interfere with Department of Agriculture inspection and may result in longer inspection times to ensure accurate identification.

1.1.5 Regulated pests

Regulated pests are regarded as actionable pests between Australia and New Zealand. Actions would be undertaken if they were intercepted/detected. As well as quarantine pests, these include new organisms as defined by the New Zealand *Hazardous Substances and New Organisms Act 1996*, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants.

1.2 Maximum pest levels

Table 1 details inspection levels and tolerances that will ensure that a 95 per cent confidence level that maximum allowable prevalence (MAP) will not be exceeded.

The sample size must be selected/nominated by the exporter or exporter delegate prior to commencement of inspection and cannot be varied. This sample size must be maintained in all subsequent inspections, including Department of Agriculture export inspection.

Table 1 INSPECTION SAMPLE SIZES AND PEST TOLERANCE LEVELS

Lot size (units)	Sample size	Acceptance level RG1 pests	Acceptance level regulated weed seeds	Acceptance level RG2 & RG3 pests
≤ 1000	450	0	≤ 6	0
1001 – 2000	520	0	≤ 7	0
2001 – 3000	550	0	≤ 7	0
3001 – 4000	560	0	≤ 7	0
4001 – 5000	570	0	≤ 7	0
≥ 5001	600	0	≤ 8	0
> 1000	950	1	≤ 12	0
> 1250	1250	2	≤ 16	0

Tolerances for irradiated product listed in Appendix 12.

1.3 Contaminants

Consignments contaminated with soil, or other potential carriers of quarantine pests (e.g. leaf litter) must not exceed tolerances below. The consignment may be reconditioned to remove the infestation. After reconditioning, the consignment must be re-inspected and may be exported if found free from infestation.

Consignment lines contaminated with soil in excess of 25g per 600 units shall be washed free of soil prior to release, re-shipped, or destroyed at the importers choice and expense.

Consignment lines contaminated with foliage in excess of one leaf per 50 units shall be resorted, reshipped, or destroyed at the importers option or expense.

SECTION 2 TREATMENT APPENDICES

2.1 Summary

The NZ BQA is divided into separate treatment pathways, called treatment appendices.

The appendices form the framework for the treatment of commodities for the species of economically significant fruit flies (RG3 pests).

The treatment appendices are treated as separate distinct pathways and as such commodities exported under the same treatment pathways may be inspected together at Department of Agriculture inspection. Commodities from separate treatment pathways may not be combined for inspection.

TREATMENT FRAMEWORK
(APRIL 2014)

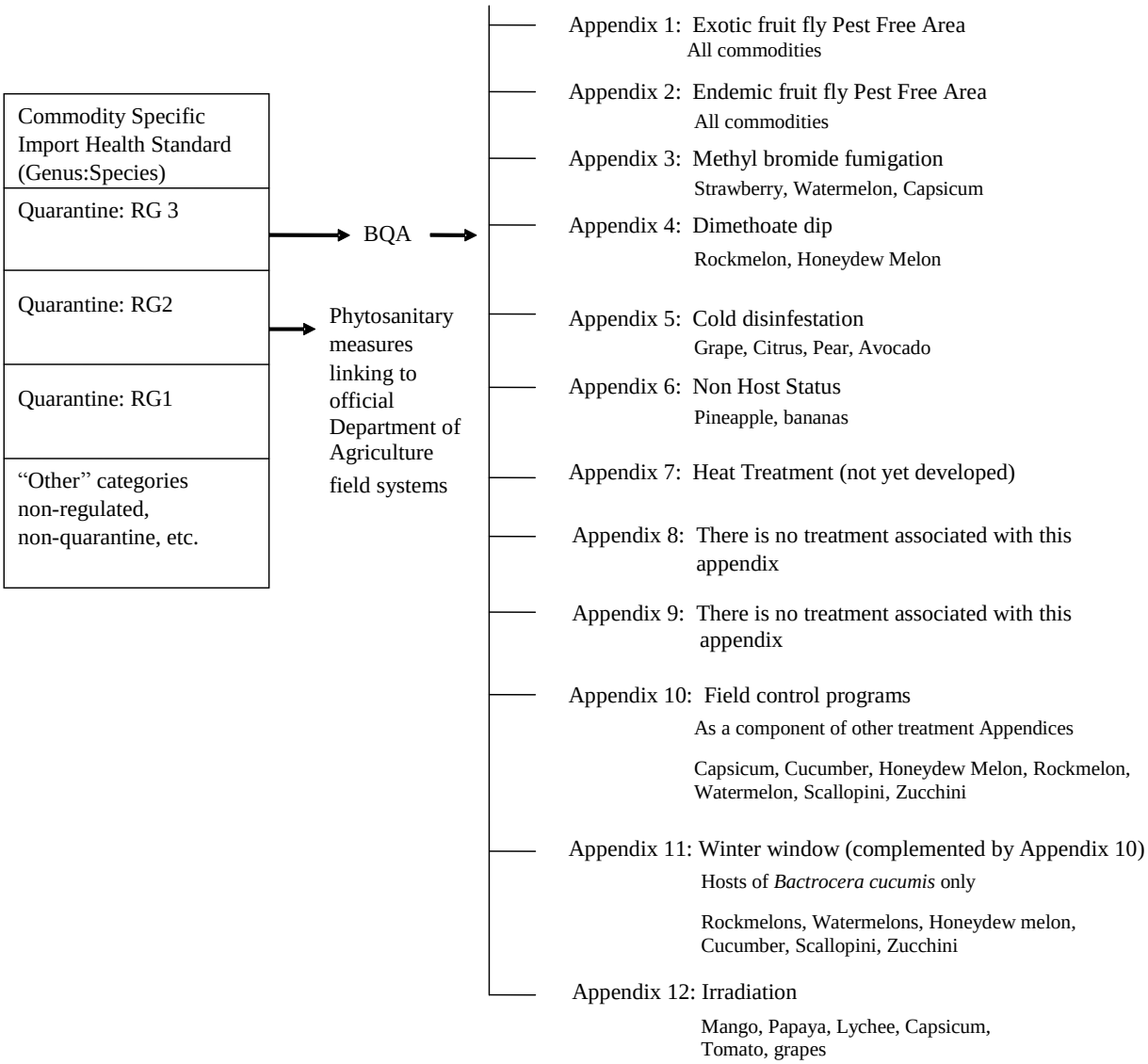


Table 2 SUMMARY OF REQUIREMENTS FOR ACCESS OF FRUIT FLY HOST COMMODITIES

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Avocado *Persea americana*	Area freedom *Appendix 2*	✓	✓		✓	✓	For full condition text, please consult the MICoR database.
	Cold storage In-transit cold disinfestation treatment *Appendix 5* 1 °C (±0.2 °C) for 16 Days	✓	✓	✓	✓	✓	

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Banana *Musa* spp.	Non-host status (Based on maturity) *Appendix 6*	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Capsicum *Capsicum annuum*	Area freedom* *Appendix 2*	✓	✓		✓	✓	For full condition text, please consult the MICoR database. * In-field pest control activities throughout the production season are required for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) otherwise irradiation at 289Gy, or fumigation is required.
	Irradiation** *Appendix 12* *150 Gy*	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database. ** Irradiation at 150 Gy can only occur if in-field pest control activities for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) are implemented throughout the production season, otherwise irradiation at 289Gy, or fumigation is required.
	Irradiation*** *Appendix 12* *400 Gy*			✓	✓	✓	For full condition text, please consult the MICoR database. ***The irradiation rate of 400 Gy is for all regulated arthropod pests.
	Methyl bromide fumigation† *Appendix 3*†† 40g/m^3 for 2 hours at ≥ 17 °C and In field control *Appendix 10* Infield pest controls	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database. † Fumigation can only occur in conjunction with Appendix 10 (field control programs) and implementation of specific field pest control activities for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) throughout the production season. If appendices 3 and 10 with field pest control activities for *Conogethes puctiferalis* (yellow peach moth) are not used, then irradiation at 289Gy must be used. Methyl bromide fumigation may be used on capsicum from all states and territories, with the exception of the parts of Western Australia that are outside the Ord River Irrigation Area fruit fly free area. ††Please refer to Table 4 (pg 46) of *Section 6.6: Treatment Appendices* for methyl bromide fumigation schedules permitted.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Citrus * *Citrus* spp.	Area freedom* *Appendix 2*	*	✓		✓	✓	For full condition text, please consult the MICoR database. * Nil grower registration required under area freedom appendix, as citrus black spot (*Guignardia citricarpa*) is restricted to the state of Queensland.
	Cold treatment (Species specific rates) *Appendix 5*** 0 °C or below for not less than 13 days or 1 °C (±0.6 °C) for 16 days	*✓	*✓	✓	*✓	✓	For full condition text, please consult the MICoR database. *Grower, packhouse, freight forwarder / load-out registration required only for the state of Queensland, where Citrus Black Spot occurs. **Please refer to Table 6 (pg 50-51) of *Section 6.6: Treatment Appendices* for contingency cold treatment schedules permitted for Queensland fruit fly (*Bactrocera tryoni*) outbreaks in pest free areas.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Cucumber *Cucumis sativus*	Area freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Winter Window *Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Grapes *Vitis vinifera*	Area freedom *Appendix 2*	✓	✓		✓	✓	For full condition text, please consult the MICoR database.
	Cold treatment *Appendix 5* 0 °C or below for not less than 13 days or 1 °C (±0.6 °C) for 16 days	✓	✓		✓	✓	For full condition text, please consult the MICoR database. * For information on the irradiation pathway please see Attachment 3 – Addendum to BQA SOM 6E – Table Grapes – Irradiation option

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Honeydew melon *Cucumis melo*	Area freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Dimethoate and in field controls ** Appendix 4 & 10*	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database.
	Winter Window ** Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Lychee *Litchi chinensis*	Irradiation *Appendix 12* 250 or 350 Gy			✓	✓*	✓	For full condition text, please consult the MICoR database. * Registration required post treatment.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Mango *Mangifera indica*	Irradiation *Appendix 12* 250 or 350 Gy			✓	✓*	✓	For full condition text, please consult the MICoR database. * Registration required post treatment.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Papaya *Carica papaya*	Irradiation** *Appendix 12* 150 Gy	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database. ** Irradiation at 150 Gy can only occur if in-field pest control activities for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) are implemented throughout the production season, otherwise irradiation at 289Gy is required, or fumigation is required.
	Irradiation *Appendix 12* 289 or 350 Gy			✓	✓*	✓	For full condition text, please consult the MICoR database. * Registration required post treatment.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Pears *Pyrus communis*	Area freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Cold treatment *Appendix 5* 0 °C or below for not less than 13 days or 1 °C (±0.6 °C) for 16 days		✓	✓	✓*	✓	For full condition text, please consult the MICoR database. * Registration required post treatment (for on-shore cold treatment).

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Pineapple *Ananas comosus**	Non-host status (Based on variety) *Appendix 6*					✓	For full condition text, please consult the MICoR database. * Only the varieties 'Smooth Cayenne', 'Aus-Jubilee', 'MD-2' (also known as '73-114') and '73-50' (also known as 'CO-2') are permitted to be exported under this appendix.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Pumpkin *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Rockmelon *Cucumis melo reticulatus*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Winter Window *Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.
	Dimethoate ** Appendix 4*			✓	✓*	✓	For full condition text, please consult the MICoR database. ***** Registration required post treatment.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Scallopini *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Winter Window ** Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Strawberry *Fragaria* spp.	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Methyl bromide fumigation *Appendix 3* 48g/m^3 for 3 hours at a temperature of at least 15°C	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Tomato *Lycopersicon esculentum*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Irradiation *Appendix 12* 150 Gy 400 Gy*			✓	✓	✓	For full condition text, please consult the MICoR database. *The irradiation rate of 400 Gy is for all regulated arthropod pests.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Watermelon *Citrullus lanatus*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Methyl bromide fumigation† *Appendix 3* 32g/m^3 for 4 hours at flesh temperatures of 21–26 °C and In field control *Appendix 10*	✓	✓	✓	✓	✓	For full condition text, please consult the MICoR database.
	Winter Window ** Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

COMMODITY	TREATMENT	REGISTRATION					CONDITIONS
		GR	PR	TR	FF	ER	
Zucchini *Cucurbita pepo*	Area Freedom *Appendix 2*		✓		✓	✓	For full condition text, please consult the MICoR database.
	Winter Window ** Appendix 10 & 11* 1 May – 1 Sept.	✓	✓		✓	✓	For full condition text, please consult the MICoR database.

GR- Grower registration PR – Packhouse registration FF – Freight Forwarder / Load out facility TR – Treatment registration ER- Export registration

2.2 Appendix 1 – Country freedom from fruit fly

The New Zealand Ministry for Primary Industries (MPI) recognise Australia is free of several species of fruit fly of economic significance to New Zealand (based on MPI Biosecurity Authority Standard 158.03.07).

Australia's freedom status for these fruit flies is maintained through quarantine restrictions and a national monitoring program. The monitoring program is managed by the Australian Chief Plant Protection Office (ACPPO) and consists of exotic fruit fly trapping and monitoring regimes conducted at international airports and seaports.

2.3 Appendix 2 – Area freedom districts within Australia

2.3.1 General requirements

Appendix 2 refers to economic species of fruit flies which are endemic to Australia for which, through trapping and monitoring regimes, area freedom for specific species of fly have been established. The areas listed below have been audited and accepted by MPI as complying with MPI Biosecurity Authority Standard 158.03.06.

Area freedom will be assumed, unless through State Department advice, the Department of Agriculture notifies MPI to the contrary. This will be done for any fruit fly free area when an outbreak is declared.

Queensland fruit fly

For Queensland fruit fly (Qfly), an outbreak will have occurred if:

- One or more larvae or pupae are found in locally grown fruit; or
- Five male Qfly are trapped within 1 km of each other, within a 14-day period; or
- A single gravid female Qfly or larvae is detected.

Mediterranean fruit fly

For Mediterranean fruit fly (Medfly), an outbreak trigger is dependent on the whether supplementary trapping is deployed after a detection of 2 male Medfly within 1 km within a 14 day period. The decision to deploy or not to deploy supplementary traps is made by the applicable State department of agriculture.

Following a detection of 2 male Medfly within 1 km within a 14 day period, larval searches will be conducted within 200 m of the discovery point.

If supplementary traps are not deployed, an outbreak will have occurred if:

- A total of 3 male Medfly are trapped within 1 km of each other, within a 14-day period i.e. the initial 2 flies plus one more; or
- A single gravid female fly or larvae is detected.

If supplementary traps are deployed (at the rate of 16 traps within 200 metres of the discovery point), an outbreak will have occurred if:

- A total of 5 male Medfly are trapped within 1 km of each other, within a 14-day period i.e. the intital 2 flies plus 3 additional flies; or
- A single gravid female Medfly or larvae is detected.

In cases where an outbreak criteria outlined above are triggered, 'Area Freedom' will be suspended until a period equivalent to the time taken for development of three generations of fruit flies has elapsed, without further flies being detected. The suspension will apply to all fruit fly host material produced within a radius of 80 km of the outbreak site, however

- For State Departments which have managements and control procedures which have been approved by MPI as meeting the requirements and conditions of MPI Biosecurity Authority Standard 158.03.06, the suspension period will be reduced to;
    - For Qfly—one generation time plus 28 days and the suspension zone will be a radius of 15 kms for a single outbreak site;
    - For Medfly— one generation time plus 28 days, or 12 weeks, whichever is longer, and the suspension zone will be a radius of 15 kms for a single outbreak site;
    - Should 2 outbreak sites occur within 1 – 3 km of each other a 30km outbreak zone will be applied, the zone will be centred on a point mid-distance between two outbreaks.

State Departments of Agriculture (or equivalent) must report all fruit fly detections in the recognised zones to the Department of Agriculture Canberra office within 48 hours of detection and identification. This information will then be supplied to MPI at the earliest opportunity.

2.3.2 Approved area freedom districts

Districts approved by MPI are listed below.

Sunraysia - Victoria and New South Wales

Note: From 2 April 2014, the Sunraysia pest free area was voluntarily suspended by the Victorian Government until further notice.

This area covers the horticulture growing districts along the Murray River in both New South Wales and Victoria and the associated irrigation systems, and includes (but is not excluded to) the townships/cities of Merbein, Coomealla, Mildura, Red Cliff, Euston, Robinvale, Boundary Bend, Nyah, Woorinen, Swan Hill, Barham, Koondrook and Kerang.

Area (d) is the area covering Mildura, Nangiloc/Colignan, Red Cliff, Curlwaa, Dareton and areas between.

Area (e) is the Central Murray including the districts of Robinvale, Euston, Boundary Bend, Wemen and areas between.

Area (f) is the Mid Murray area including the townships of Nyah, Swan Hill, Koondrook, Barham and areas between.

Riverland - South Australia

This area covers the horticulture growing districts along the Murray River and associated irrigation systems from the Victoria Border (including 3 properties located in the Shire of Mildura), through

the townships of (but not excluded to), Paringa, Renmark, Loxton, Berri, Barmera, Waikerie, Cadell, Blanchetown and Walkers Flat.

Area (g) is those districts surrounding the townships of Renmark, Loxton, Berri,Barmera, Waikerie and areas between.

Area (h) is the Riverland extension districts of Cadell, Blanchetown, Walkers Flat and Swan Reach, the Shire of Mildura and areas between.

Area (i) the Mypolonga Township surrounds.

Tasmania

The state of Tasmania, through a trapping regime centred on ports and airports to detect the entry of any fruit flies that may have been transported from the mainland, can also claim area freedom from fruit flies. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

The Ord River Irrigation Area – Western Australia

This area covers the Ord River Irrigation Area (ORIA) as outlined below. This is for Mediterranean fruit fly area freedom only.

Area (j) Ord River Irrigation Area (Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the town site of Kununurra and north-west of the Ord River).

NOTE: **Should any stages of Risk group 3 fruit fly (alive or dead) be found during Department of Agriculture or industry inspections in Australia, the Department of Agriculture will inform the relevant State Department of Agriculture of the detection. The Department of Agriculture will suspend area freedom certification (for New Zealand and all other markets) until the cause of the find can be determined.**

Should any stages of Risk group 3 fruit fly (either alive or dead) be found during an MPI import inspection, area freedom certification will be suspended for all districts of Australia until a Department of Agriculture audit determines the cause of the fruit fly find. Reinstatement of areas not directly involved in the fruit fly detection may be permitted depending on results of the Department of Agriculture audit.

Should any stages of a fruit fly species other than Queensland or Mediterranean fruit fly be detected and found to cause an outbreak, the period of suspension will be negotiated between the Department of Agriculture and MPI.

2.4 Appendix 3 – Fumigation

This treatment pathway allows the export of watermelons, strawberries and capsicums to New Zealand. Fruit must be subjected to methyl bromide fumigation.

Waterlemons and capsicums exported under this pathway must also comply with Appendix 10 which covers field control programs of fruit flies. Therefore strawberries, watermelons and capsicums may not be combined for inspection.

Fumigation practices must also be carried out in accordance with the current version of the Department of Agriculture's Methyl Bromide Standard.

The Standard contains details for effective fumigation procedures and can be found on the Department of Agriculture website and via the link on the Manual of Importing Country Requirements or MICoR database website.

Note: Methyl bromide fumigation may be used on capsicum from all states and territories, with the exception of the parts of Western Australia that are outside the Ord River Irrigation Area fruit fly free area.

2.5 Appendix 4 – Dimethoate

This treatment pathway allows the export of rockmelons and honeydew melons and to New Zealand. Fruit must undergo mandatory dimethoate treatment. For some commodities this appendix must be used in conjunction with Appendix 10 (field control programs).

2.6 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocados can be treated by cold storage disinfestation for export to New Zealand. Cold disinfestation treatments can be completed on shore or in-transit.

2.7 Appendix 6 – Non host

This pathway deals with commodities which have been accepted by MPI as non-host of endemic Australian fruit flies, either based on maturity (i.e. mature green bananas) or by approved varieties (pineapples). Only pineapples of the 'Smooth Cayenne' variety or approved varieties that are genetically ≥ 50 per cent 'Smooth Cayenne' and bananas can be exported under this pathway.

Bananas are accepted as being non-hosts to the fruit fly species of economic significance present in Australia when in the unripe stage of maturity.

Bananas must be harvested, packed and exported in the unripe (i.e. mature green) stage to New Zealand. Consignments containing bananas at the colour break to full ripe stage will be rejected for export to New Zealand.

2.8 Appendix 7 – Heat treatments

At this time there are no commodities permitted for export under this pathway.

2.9 Appendix 8 – Not currently in use

2.10 Appendix 9 – Not currently in use

2.11 Appendix 10 – Field control programs

The field control programs referred to in this section of the manual specifically relate to the **control of Risk Group 3 fruit flies.**

This appendix is intended to be used in combination with other appendices rather than as a stand-alone treatment. For example, honeydew exports to New Zealand under the dimethoate dip treatment

require both a post-harvest dip and pre-harvest field control program – a combination of both Appendix 4 and Appendix 10.

Treatment	Commodity
Appendix 3 – Methyl bromide fumigation	watermelon and capsicum
Appendix 4 – Dimethoate	honeydew melon, rockmelon
Appendix 11 – Winter window	rockmelon, honeydew melon, cucumber, watermelon, zucchini, scallopini

2.12 Appendix 11 – Winter window

A ‘winter window’ access period has been negotiated between MPI and the Department of Agriculture, specifically for those commodities subject to infestation by *Bactrocera cucumis* (cucumber fruit fly).

Winter window access specifically applies to cucurbits, and relies on in-field control mechanisms rather than post-harvest treatment. The access period is between **1 May and 1 September in any year** (arriving in New Zealand).

Rockmelons, scallopini, honeydew melons, zucchini and **cucumbers** can be exported under this appendix from areas recognised free from Mediterranean fruit fly. Currently areas recognised free of Mediterranean fruit fly are the Ord River Irrigation Area in Western Australia and the states of Queensland, New South Wales, Victoria, the Northern Territory, and Tasmania.

As cucumber fruit fly (*Bactrocera cucumis*) is the only RG3 pest listed for watermelons, this commodity can be exported under this appendix from all areas of Australia.

2.13 Appendix 12 – Irradiation

Mangoes, lychees, papayas, tomatoes, capsicums and grapes may be exported under this treatment pathway.

Mangoes and lychees

The minimum treatment rate, specified by MPI, for mangoes and lychees exported from Australia is 250 Gy. This minimum irradiation rate is deemed to be effective for those fruit flies and regulated arthropods within the commodity pest listings for mangoes and lychees (see Attachment 1).

Tomatoes

The minimum treatment rate specified by MPI for tomatoes exported from Australia is 150 Gy. This minimum irradiation rate is deemed to be effective for all fruit flies.

Capsicum, papayas and grapes

The minimum treatment rate, specified by MPI, for papaya and capsicum exported from Australia is 150 Gy. The 150 Gy treatment is accepted by MPI as an effective treatment for fruit fly pests. However, if this rate is chosen, then effective in-field management practices must be undertaken for *Conogethes punctiferalis* (yellow peach moth) prior to export.

For capsicums and papaya, if irradiating at 150 Gy there is an option to fumigate with methyl bromide as a control for yellow peach moth if the grower has chosen not to implement field control programs.

A treatment option of irradiation at 289 Gy is also available for grapes, papaya and capsicum where no in-field yellow peach moth control is undertaken. The 289 Gy treatment option has been accepted by MPI as effective for fruit flies and *Conogethes punctiferalis*.

Alternative treatment rates

400 Gy has been approved as a generic treatment rate for all insects on mangoes, lychees, tomatoes and capsicum - excluding adult or pupae of Lepidopteran species, Acari (excluding Tetranychidae) and vectoring species (identified as [vect] in the commodity pest lists).

Should efficacy data not be on file for other arthropods irradiated at 400 Gy, corrective/treatment actions may need to be instigated prior to the Department of Agriculture endorsing the consignment or MPI releasing the consignment, should the pest interception be encountered upon arrival in New Zealand.

Vectors

If vectors are found in the consignment during phytosanitary inspection, the consignment must either be rejected for export or fumigated. Note: Vectors are identified in the SOM pest lists with the following (vect.).

Plant pathogens

If a plant pathogen is found in the consignment during phytosanitary inspection, the consignment must be rejected and is not eligible for export.

Lepidoptera

If Lepidoptera adults or pupae are found during Department of Agriculture phytosanitary inspection, the consignment must be fumigated. Where Lepidopteran adults or pupae are detected on-arrival in New Zealand, the effectiveness of the irradiation dose will be subject to review based on the pest intercepted.

Mites

If mites from the order Acari (excluding those from the family Tetranychidae) are found during Department of Agriculture phytosanitary inspection, the consignment must be treated at 500 Gy or fumigated. Where mites from the order Acari (excluding those from family Tetranychidae) are detected on-arrival in New Zealand the effectiveness of the irradiation dose will be subject to review based on the pest intercepted.

- 400 Gy will manage all Tetranychidae
- 500 Gy will manage all other Acari

To prevent delays in collating this information, treatment certificates stating Dmin and Dmax doses are to be supplied to MPI with all exported consignments.

Detection of a live arthropod pest in a consignment at inspection by Department of Agriculture or MPI, does not necessarily result in the consignment being rejected for export. Sterility of the pest is an acceptable outcome on this treatment pathway and may result in the pest still being alive after treatment.

The Food Standards Australia & New Zealand (FSANZ) *Australia New Zealand Food Standards Code* for irradiated tropical fruits has a Dmax of 1000 Gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at www.foodstandards.gov.au and www.foodsafety.govt.nz.

SECTION 3 GROWER RESPONSIBILITIES

3.1 Summary

Treatment Pathway	Commodity	Requirement
Appendix 2 Area Freedom	Avocados	Growers must register with the Department of Agriculture to maintain field controls for Risk Group 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Capsicum	Growers must register with the Department of Agriculture for the control of Risk Group 2 pest *Conogethes punctiferales* (unless opting for mandatory methyl bromide fumigation).
	Grapes	Growers must register with the Department of Agriculture to maintain field controls for the RG 2 pest *Conogethes punctiferales*. Department of Agriculture will certify southern state grapes area free for the RG 2 pest *Maconellicoccus hirsutus*
	Other	Growers are not required to register with the Department of Agriculture for export under this treatment.
Appendix 3 Fumigation	Strawberries	Growers are not required to register with the Department of Agriculture for export under this treatment.
	Watermelons	Growers must register with the Department of Agriculture under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production
	Capsicum	Growers must register with the Department of Agriculture under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 4 Dimethoate	Honeydews	Growers must register with the Department of Agriculture under Appendix 10 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 5 Cold Treatment	Avocadoes	Growers must register with the Department of Agriculture to maintain field controls for the RG 2 diseases Cercospora Spot Blotch and Sun Blotch Viroid.
	Citrus	Queensland growers must register with the Department of Agriculture to maintain field controls for the RG 2 pest *Guignardia citricarpa* (citrus black spot). Other state departments survey for citrus black spot, negating the need for grower registration.
	Grapes	Growers must register with the Department of Agriculture to maintain field controls for the RG2 pest *Conogethes punctiferales* (yellow peach moth). The Department of Agriculture will be certifying Southern State grapes area free for the Risk group 2 pest *Maconellicoccus hirsutus* (hibiscus mealybug).

Treatment Pathway	Commodity	Requirement
Appendix 6 Non Host	Pineapples	Growers are not required to register with the Department of Agriculture for 'Smooth Cayenne' and other approved related varieties pineapples under this treatment. Growers must keep records verifying 'Smooth Cayenne' and other approved related vareities' parentage.
	Bananas	Growers are required to register with the Department of Agriculture to maintain field controls for the high impact non fruit fly pest *Maconellicoccus hirsutus* (pink hibiscus mealy bug).Unless opting for mandatory fumigation.
Appendix 10 In field controls	All commodities	All commodities which require Appendix 10 (In field controls for fruit fly) must be registered.
Appendix 11 Winter window	Rockmelons, honeydew melons, cucumbers, watermelons zucchinis and scallopinis	Growers must register with the Department of Agriculture under Appendix 11 to maintain field controls minimising the risk of fruit fly infestation during production.
Appendix 12 Irradiation	Mango, Lychee & Tomato	Growers are not required to be registered under this pathway.
	Papaya, Capsicum & Grapes	Growers must register with the Department of Agriculture to maintain field controls for Risk Group 2 *Conogethes punctiferalis* (yellow peach moth) if exporters intend to irradiate at 150 Gy.

3.2 General requirements

Growers of commodities requiring registration must maintain spray diaries and implement field hygiene requirements that demonstrate appropriate management and recording for those pests listed as RG2 and RG3 in the pest lists (Attachment 1).

3.3 Registration

Application for registration (Attachment 2.1) will be made to the Department of Agriculture office in the grower's region. To ensure there are no delays with processing and completing registrations it is recommended that applications be forwarded to the Department of Agriculture no later than 6 weeks prior to export. Applications are processed in order of receipt; late applications may be subject to delays. Applications must include a property map identifying blocks on which the relevant NZ BQA commodities are grown.

Growers may apply direct to their regional Department of Agriculture office or to the packhouse they are supplying. Packhouses must forward any grower applications through to the Department of Agriculture as soon as possible for inclusion on the regions "master" grower/packer list.

Once application for registration is received regional Department of Agriculture staff will organise a time to visit the property to conduct a preliminary audit. During the visit the inspector will ensure the grower(s) are aware of their responsibilities under the SOM, check relevant documentation eg spray diaries, conduct an inspection of the property (registered blocks), and will allocate a grower registration number.

Growers that have previously registered under this arrangement in the previous season without non-conformance will not require a Department of Agriculture visit prior to export commencement. However, an audit must be performed early in the season.

NOTE: In the above circumstance, growers MUST notify the Department of Agriculture of their intent to commence export at least 6 weeks prior to export. Growers must provide evidence that required control measures have been carried out (eg spray diaries). If Department of Agriculture approval is granted, a time for an audit visit will be organised. Failure to comply with these directions may mean growers, irrespective of previous participation, will require an 'initial audit' before being allowed to commence export.

3.4 Orchard responsibilities

Growers must apply recommended field controls a minimum of 4 weeks prior to commencement of harvest. Field monitoring and spray diary records must be kept for all activities relating to registered blocks. The applicable grower declaration form (Attachments 2.13, and 2.14) for the product must be completed and accompany each consignment of product intended for export.

NOTE: the Queensland Government Department of Agriculture, Fisheries and Forestry previously issued a farm note (F76/DEC92) which detailed requirements for field control programs against infestation of *Bactrocera cucumis*, these constituted the minimum requirements for the control of fruit fly. This farm note is no longer in print but the requirements are still accepted by the Australian Government Department of Agriculture. Newer chemicals developed and registered for the control of fruit fly may be utilised. All spray programs to meet Department of Agriculture requirements must be carried out at the recommended label rates. All activities relating to field controls must be recorded and held on file for a 12 month period.

Growers are permitted to use the services of a state registered crop monitor. Crop monitors will be responsible for ensuring adequate monitoring records are maintained for each registered grower. Records including spray regime and recommendations must be available to the Department of Agriculture upon request.

NOTE: All cartons of produce must be marked with grower number and packhouse number to enable traceback.

3.4.1 Citrus growers

Citrus fruits have two Risk Group 2 pests—*Guignardia citricarpa* (citrus black spot) and *Phyllocnistis citrella* (citrus leafminer) — however, only citrus growers in the state of Queensland where *Guignardia citricarpa* is found need to be registered. Although growers in the southern states of New South Wales, Victoria and South Australia are not specifically required to be registered for this program, monitoring and spray diaries must be kept.

3.4.2 Avocado growers

All avocados must be sourced from growers and blocks registered with an official tree certification scheme (such as the Avocado Nursery Voluntary Accreditation Scheme or relevant state departments) to ensure freedom from avocado sun blotch viroid and undergone appropriate pest control activities that are effective against or been sourced from an area free (verified by an official detection survey) from cercospora spot blotch (*Pseudocercospora purpurea).*

In addition to the standard grower requirements listed in Section 3.3, avocado growers must supply the following documented evidence for registration:

a) Grower maps to include indexed and non-indexed fruit;
b) Official verification of orchard freedom from sun blotch viroid;
c) Sterilisation procedures between indexed and non-indexed blocks;
d) Buffer zone/s between indexed and non indexed blocks (i.e. row spacing between blocks); and
e) Pruning procedures to prevent sun blotch viroid re-infestation (i.e. no foliage or fruit contact with soil or neighbouring avocado trees).

NOTE: Further details on avocado accreditation for sun blotch viroid can be sourced from the Australian Avocado Growers Association or State Government Departments of Agriculture (or equivalents).

3.5 Audits

The Department of Agriculture will audit growers to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency*

Growers will receive an initial audit prior to season commencement (or early in export season if previously registered subject to conditions above) and one further audit during the season.

For winter window commodities, the Department of Agriculture will undertake monthly audits of the property throughout the growing/harvesting season in the initial season (where substantial compliance is recorded then audit frequency will be reduced to 2 monthly intervals).

The Department of Agriculture will conduct audits of registered growers throughout the growing/harvesting season. All audits of growers will be charged at standard fee for service rates, these details are available from Department of Agriculture regional offices or www.daff.gov.au/fees/biosecurityfees-charges/export.

NOTE: the Department of Agriculture audit regime will usually be intensified during the first season of a new treatment. This increased audit regime is intended to ensure the requirements of the new treatment are being met, and to identify any problems or potential problems with implementing the treatment.

All Department of Agriculture audits will be ‘announced’ audits giving the grower at least two days notice.

Unannounced monitoring audits may be conducted if they are deemed necessary by the Regional Export Manager. Unannounced monitoring audits are not chargeable unless major non-conformities have been recently identified, or are detected during the audit.

Department of Agriculture audits of grower responsibilities may be conducted simultaneously with packhouse and/or exporter audits.

NOTE: Where a grower elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional

office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

3.5.1 Non Compliance

If minor non-compliances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-compliance is identified, the Department of Agriculture Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A grower found to be not managing orchard(s) in accordance with this manual, through consistent non-compliances, may be suspended from the New Zealand export program.

The timing of the follow up audit is dependent on the problem and its relationship to growing/harvesting of the current crop. Department of Agriculture inspectors will determine if follow up audits are required.

3.5.2 Packhouse Approved Arrangement systems

Where a packhouse has an Approved Arrangement (AA) with the Department of Agriculture and is packing a commodity for which grower registration is required, the packhouse must register and audit growers in the following manner:

a) On initial registration;
b) Following registration at least once during the growing season; and
c) In subsequent seasons once during each growing season.

During Department of Agriculture auditing of AA establishments, a sample of registered growers will be reviewed for compliance with the requirements of the SOM. If a major non-compliance is detected, the suspension of the packhouse may be considered necessary as it is the packhouse that is responsible for ensuring compliance with the Department of Agriculture/New Zealand requirements. Department of Agriculture audits of growers registered by the packhouse will be conducted on the following basis:

a) In the initial year of registration – 5 per cent of all growers;
b) Subject to compliance the previous year – 2½ per cent of all growers;
c) If non-compliances were detected at a previous audit – increase random selection of growers to 10 per cent of all growers.

3.5.3 Security and supervision

Security of commodities requiring field control programs (i.e. Appendix 10), or where the treatment pathway is management practices (i.e. Appendix 2 and 6), will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

SECTION 4 CROP MONITOR RESPONSIBILITIES

4.1 Registration

Crop monitors must register with the Department of Agriculture (Attachment 2.4) to undertake crop monitoring duties for the NZ BQA.

A crop monitor will include in their application, details of relevant registered growers and the commodities covered.

4.2 Audit

Crop monitors will provide registered grower property records upon Department of Agriculture/New Zealand Ministry for Primary Industries (MPI) request. The Department of Agriculture will perform random audits of each registered crop monitor at least once per year/season for each commodity field monitoring service provided. Audits will include randomly selected growers.

If three growers (minimum) are covered by the same crop monitor, and audits reveal substantial compliance, additional grower audits of the crop monitor may be waived by the Export Manager for that year/season.

All audits of crop monitors will be charged at standard fee for service rates.

Where a crop monitor elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional office within a minimum of 10 working days prior to the date of effect.

4.3 Non compliance

If minor non-compliances are detected at audit, corrective action must be taken and a follow up audit conducted within 7 days. If major non- compliances are detected, the Department of Agriculture Canberra office must be contacted as soon as practically possible and an assessment made with regards to immediate suspension until corrective action has been taken.

A crop monitor found to be not meeting responsibilities in accordance with this manual through consistent non- compliances may be suspended from the New Zealand export program.

SECTION 5 PACKHOUSE RESPONSIBILITIES

5.1 General requirements

Packhouses are required to maintain secure conditions for NZ BQA commodities and have documented systems in place to ensure grower identification and segregation is maintained.

All cartons must be marked with a standard trade description in accordance with the *Export Control (Plants and Plant Products) Orders 2011* and some form of grower and packhouse identification (including grower and packhouse number if applicable).

In addition to normal Department of Agriculture registration requirements under the *Export Control (Plants and Plant Products) Orders 2011*, packhouses (where applicable) must be registered specifically for New Zealand. Application for registration (Attachment 2.2) will be made directly to Department of Agriculture regional offices.

5.2 Documentation

Packhouses are responsible for maintaining all documentation, and must provide to the Department of Agriculture the following upon request:

a) Copy of Department of Agriculture endorsed packhouse registration form;
b) List of growers registered with Department of Agriculture who supply to the establishment;
c) Where grower registration is a requirement, a copy of Department of Agriculture endorsed grower registration forms;
d) Receival/despatch records of produce from individual growers.

Export documentation will be held on file for 2 years (minimum) and are subject to Department of Agriculture /New Zealand Ministry of Primary Industries (MPI) audit.

5.3 Delegation of exporter responsibilities

5.3.1 General

Where a packhouse has been delegated exporter responsibilities in accordance with directions contained in the SOM, the packhouse must undertake and record all functions delegated to them. Delegated responsibilities may include:

- The security of cleared/treated produce whilst on premise;
- Supervision of loading and unloading of all consignments into and out of the packhouse premise;
- Clear identification of all New Zealand destined produce;
- Documenting all incoming and outgoing produce intended for export under the NZ BQA; and
- Inspections.

Packhouses will be audited to ensure requirements for these functions are known.

5.3.2 Security and supervision

The exporter delegate (ED) will arrange appropriate transportation of treated products to ensure no cross infestation or substitution can occur.

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Full details of the secured product will be included on a transfer certificate (EX186) and/or Notice of Intention to Export (EX28/RFP). A Department of Agriculture transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by the Department of Agriculture.

5.3.3 Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand. A copy of grower line inspection records must be presented to Department of Agriculture staff at the time of Department of Agriculture inspection.

Exporter inspection may be undertaken at a packhouse when delegated. See Section 7.2 for more details about exporter delegate inspections. A packhouse inspection will satisfy requirements for an exporter inspection if performed by an approved ED. Inspections must be recorded (refer to Attachment 2.6) and retained for audit purposes. A copy of the inspection record must accompany the consignment to the Department of Agriculture inspection.

If the exporter (or exporter delegate) opts for the Department of Agriculture to carry out a consignment line inspection, then copies of grower line inspection records must be presented to staff at the time of the Department of Agriculture inspection.

5.4 Audit

The Department of Agriculture will audit packhouses to ensure compliance with NZ BQA requirements. Details of these audits can be found in *Table 7 – Audit Frequency.*

Grower registers, staff training, completion and storage of records and security responsibilities will be audited by the Department of Agriculture. Variance to audit requirements can be made at the discretion of the Export Manager.

AA packhouses will be audited for compliance with the NZ BQA as per the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*"QOPS Ref. No: E/5004/AP

All audits of packhouses will be charged at standard fee for service rates, these details are available from Department of Agriculture regional offices or www.daff.gov.au/fees/biosecurityfees-charges/export.

Department of Agricuture audits of packhouse responsibilities may be conducted simultaneously with grower and/or exporter audits.

NOTE: Where a packhouse elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

5.4.1 Non compliance

If minor non-conformances are detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-conformances are detected, the Department of Agriculture Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A packhouse found to be not managing their establishment in accordance with this manual through consistent non-conformances may be suspended from the New Zealand export program.

5.5 Approved Arrangements – Packhouse

5.5.1 General requirements

The following activities must be undertaken by Approved Arrangement (AA) packhouses:

(a) All individual packages must include grower numbers and packhouse numbers;
(b) Declared fruit fly free area packhouses must have a register of all growers' names and addresses and allocated grower numbers for all NZ BQA commodities;
(c) Should area freedom suspension zones be established, packhouses must be able to provide separate registers showing growers who are still in area freedom districts against those who are located within the suspension zone(s). Establishment Quality Manuals are required to show procedures for identification, segregation and packing processes to ensure 'area free' commodities cannot be contaminated whilst on the establishment and/or surrounds;
(d) It is recommended contingency plans are incorporated within quality manuals to address additional procedures required in the event of fruit fly outbreaks. Whilst each fruit fly outbreak (when they occur) must be considered separately, a generic procedure should be established as a reference;
(e) Packhouses not undertaking official disinfestation treatments and that do not have Risk group 2 or 3 pests; will not need to include additional systems to their Quality Manuals;
(f) Packhouses with Risk group 2 or 3 pests will need to ensure grower registration, commodity segregation; identification and inspections meet the NZ BQA. It is likely some quality manuals will need to be amended or have attached an appendix to meet the new export requirements for NZ BQA;
(g) To gain accreditation, five joint inspections will be undertaken with the Department of Agriculture to assess the ability of packhouse staff to perform inspections in accordance with the directions contained in the SOM.

AA packhouse conducting 'treatments' under the NZ BQA must be registered for this purpose in addition to normal registration requirements. Section 6 of the SOM outlines the requirements for Treatment Centres.

5.5.2 Audit

AA packhouses with NZ BQA responsibilities incorporated into their current Quality Manuals will be audited in conjunction with standard auditing requirements.

Those choosing to separate NZ BQA commodity responsibilities from other AA accreditation will have the two systems audited separately but within the usual audit schedules applying to the establishment.

Establishments packing Risk group 2 pests (host commodities) will have a percentage of those registered growers audited to ensure compliance with the NZ BQA.

Packhouses who elect to register growers of host commodities of Quarantine Risk group 2 pests must also conduct audits of all their registered growers in the following manner;

a) On initial registration;
b) Following registration, at least once during the growing season; and
c) Continual registration–once during each growing season.

For Department of Agriculture audits, registered growers will be randomly selected on the following basis;

a) Initial year of registration – 5 per cent of all growers registered by the packhouse;
b) Subsequent growing seasons- 2.5 per cent of all growers registered by the packhouse (subject to compliance from previous year);
c) Non-conformance at a previous audit -10 per cent of all growers registered by the packhouse.

Should a major non-compliance be detected at audit, the packhouses will be suspended from the New Zealand program immediately. Depending on the type of non- compliance, suspension from the Department of Agriculture AA may be considered. Such a decision will be made by the Department of Agriculture AA Contact Officer in conjunction with the Regional Manager and Canberra Office.

5.5.3 Inspection requirements

AA packhouses are permitted to undertake the required inspection regimes as “in-line” processes.

In-line inspection systems will be granted when the AA establishment has systems in place that;

a) Address grower field controls (horticulture extension officers, reference to crop monitors etc.);
b) Have formal receival inspection records;
c) Have sorter and grader recording systems within the processing line to ensure segregation of grower lines.

In order to properly document inspections for NZ BQA commodities, AA packhouse will undertake “in-line” consignment inspections according to the following table;

Table 3 IN-LINE INSPECTION SAMPLING REQUIREMENTS

Inspection type	No. of fruits	Per time period	Over period of time	Total Fruits
(a)	100	1/2 hour	3 hours	600 units
(b)	200	hourly	3 hours	600 units
(c)	100	hourly	6 hours	600 units

Table 3 sets out sampling regimes that can be applied as in-line process controls within an AA packhouse. The maximum continuous time run for New Zealand is a 24 hour process. It is extremely important this type of in-line process control is undertaken and recorded for each consignment run of NZ BQA commodities.

All in-line process controls (Table 3) must be undertaken by a Department of Agriculture Approved Inspector. Where inspections are performed as per Table 3, individual grower line inspections are not required.

During inspection, any fruits/vegetables that are soft, bruised or display rot spots will be cut to determine evidence of fruit fly infestation, and if so, if the infestation is alive or dead. The results of all produce cut will be recorded on the inspection sheets.

Packhouse can make up any type of sampling system based on Table 3. However, packhouse must document what regime is to be used before the initial production run and ensure the sampling regime is representative of the consignment(s) being assembled.

Packhouse requirements pertaining to identification, segregation, security and records for all NZ BQA produce must be part of the Process Management System submitted for Department of Agriculture approval.

NOTE: Packhouses will lift 5 per cent of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

5.5.4 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers will be included on all packages covered by the NZ BQA.

For produce being transferred intrastate or interstate, documentation will be required to ensure the receiving company and Department of Agriculture inspector can verify security and integrity of the consignment on arrival. A declaration to the following effect will be made on the ‘EX 222’or internal transfer note as follows:

"*The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by MPI and specified tolerances have not been exceeded.*"

Where a phytosanitary certificate is to be signed in a state other than the state of production and packing, an official inspection report must be attached to the EX222 or EX186 together with an internal transfer note.

5.5.5 Post treatment security

Where an AA packhouse has accepted exporter delegation for the security, and loading supervision, of NZ BQA commodities, the packhouse will nominate the person(s) who will be responsible for documenting procedures, carrying out, and recording the following:

a) The security of cleared/treated produce whilst on the premises;
b) Supervision of loading and unloading of all consignments into and out of the premises intended for export under NZ BQA;
c) Clear identification of all NZ BQA produce;
d) Documenting all incoming and outgoing produce intended for export to New Zealand.

The exporter/ED will arrange appropriate transportation of certified NZ BQA products to ensure no cross infestation or substitution can occur. Where delegation of loading supervision is undertaken, both the exporter and loading company will have copies of acceptance of duties on file.

For product not being loaded for direct export shipment, full details of the treated product will be included on Transfer Certificate (EX186) or Notice of Intention to Export (EX28) and signed by a Department of Agriculture inspection officer.

SECTION 6 TREATMENT CENTRE RESPONSIBILITIES

6.1 General requirements

Treatment centres must have documented systems of identification, segregation, process controls, post security treatment and supervision responsibilities.

All staff must be appropriately trained to carry out designated responsibilities.

6.2 Registration

In addition to normal Department of Agriculture registration requirements under the *Export Control (Plants and Plant Products) Orders 2011*, all treatment centres must be registered (Attachment 2.3) specifically for New Zealand. Application for registration will be made directly to Department of Agriculture Regional Offices.

6.3 Audit

The Department of Agriculture will audit treatment facilities to ensure compliance with NZ BQA requirements. Details of these audits can be found in: *Table 7 – Audit Frequency.*

Product identification, calibration, load out activity, completion and storage of records, and product security responsibilities will be audited by the Department of Agriculture. Records pertaining to these aspects will be checked for accuracy at audit. Variance to audit requirements can be made at the discretion of the Export Manager.

All audits of treatment facilities will be charged at standard fee for service rates.

NOTE: Where a treatment centre elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional office within a minimum of 10 working days prior to the date of effect. Any outstanding audits will be conducted during the 10 working day period.

6.3.1 Non compliance

If minor non-compliance is detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non- compliance are detected, the Department of Agriculture Canberra office must be contacted as soon as practically possible, and an assessment will be made with regards to immediate suspension until corrective action has been taken.

A treatment centre found to be not managing their establishment in accordance with this manual through consistent non- compliance may be suspended from the New Zealand export program.

6.4 Post treatment security

6.4.1 Registration

The exporter must nominate, in their application for registration (Attachment 2.5), the person(s) who will be responsible for documenting procedures, carrying out and recording the following:

a) Security of treated produce whilst on the premises;

b) Supervision of loading and unloading of all consignments into and out of the premises;
c) Identification and segregation of consignments intended to be treated; and
d) Documenting all incoming and outgoing produce intended to be exported to New Zealand.

6.4.2 General requirements

Security of commodities requiring field control programs (i.e. Appendix 10) or where the treatment pathway is field management practices (i.e. Appendix 2 and 6) will be maintained immediately after harvest. For all other goods, security of the product will occur after post harvest treatment.

Staff loading containers will ensure minimum time delays in moving commodities from the secure area into container(s). Product must not be left unsecured. Loading procedures must mitigate potential infestation during container loading. If loading at night, lighting must be of a type that does not attract pests (e.g LED).

Approved security measures for security and transportation of produce will include either;

- Full shrink-wrapping and sealing as a palletised unit (including the surface area between the bottom row of cartons and the actual pallet); or
- Full enclosure of each pallet with shade mesh cloth with a maximum opening of 1.6 mm (including the surface area between the bottom row of cartons and the actual pallet), or
- Loading direct into clean panotech vans/containers with units sealed by Department of Agriculture officers; or
- Cool storing unprotected, at temperatures up to 5 °C with a minimum of 1 metre separation between fumigated/treated produce and any untreated product (except commodities treated under area freedom). Signage must be in place in the storage area reiterating this separation requirement; or
- Cool storing protected in secure packages at any temperature (except commodities treated under area freedom).

Should any treatment operator/packhouse or freight forwarder wish to vary the above security arrangements, details of the system of operation should be forwarded to the Export Manager for assessment and approval.

6.5 Post treatment transportation

The exporter/ED will arrange appropriate transportation to ensure no cross infestation or product substitution can occur.

Products transported to another destination for export loading must be subject to strict security provisions. The exporter/ED will ensure the transport medium is clean and other products (i.e. untreated/non-secure commodities), that could cause cross infestation are not loaded without taking appropriate security precautions. That is, either the other commodities are secured or the New Zealand produce is secured (as per Section 6.4.2).

Full details of the secured product will be included on a transfer certificate (EX186) and/or Notice of Intention to export (EX28/RFP). A transfer certificate is to be issued for all products travelling interstate. For intrastate travel, a documented pathway is to be approved by the Export Manager in each region. This process will be audited by the Department of Agriculture.

NOTE: Export Managers may approve variations to the above documentation requirements to suit a particular state's operations. The use of facsimiles for transferring this information is permitted. Where other than official Department of Agriculture documentation is used, it is recommended audits be undertaken frequently to enable confidence within the systems.

Should inspecting officers find breaches to security during transit; consignments will be rejected. For some commodities reconditioning and re-inspection may occur.

The Department of Agriculture will audit load out facilities to ensure compliance is being maintained.

6.6 Treatment Appendices

6.6.1 Appendix 3 – Fumigation

Fumigation practices must be carried out in accordance with the current Department of Agriculture Methyl Bromide Standard. The Standard contains details for effective fumigation procedures and can be found on the Department of Agriculture website.

All fumigations must be performed with the amount of product space equal to or less than 50 per cent of total air space within the chamber/tent. Fumigation treatment requirements are detailed in Table 4.

Table 4 METHYL BROMIDE FUMIGATION TIME/TEMPERATURE DOSE RATES

Temperature (flesh)	Dose Rates	Times
21 – 26 °C and above	32g/m^3	Watermelon - 4 hours
15 °C and above	48g/m^3	Strawberry - 3 hours
≥ 17 °C and above	40g/m^3	Capsicum – 2 hours

Note: For capsicum fumigated with methyl bromide in conjunction with appendix 10 and infield controls for yellow peach moth (*Conogethes punctiferalis*), or for capsicum sourced from PFAs where growers are not implementing infield control for yellow peach moth (*Conogethes punctiferalis*), the methyl bromide fumigation option of 32 g/m^3 for 2 hours at 21 °C (and above) is acceptable.

Treatment facilities must maintain documented systems. Systems will include:

a) Incoming product identification;
b) Segregation from other produce and clearly marked ‘New Zealand’;
c) Treatment processes and controls. Details of how each incoming consignment is reconciled to each treatment (i.e. batch numbers);
d) Treatment records;
e) How measuring equipment is calibrated, how often and by whom;
f) Security arrangements after treatment;
g) Maintenance of segregation from untreated product;
h) Supervision and security arrangements at loading.

It is recommended individual procedures accompanied by work instructions be written to define the processes and controls. The following criteria should be considered:

a) Address how assessment is made to enable a 50 per cent product capacity, in relation to the overall volume within the chamber or tent;
b) Define how the product will be equally spread throughout the chamber/tent to enable free fumigant flow throughout the stack;
c) How many units will be sampled to measure lowest flesh temperature of product?;
d) If tent fumigation is being performed, by whom and when is the tent checked for holes/tears?;
e) Who, how and when is temperature measuring equipment calibrated? How is this recorded?;
f) Where the in-process gas monitoring lines are located within the stack for verification of fumigant dose rates, and who is responsible for reading and recording this information?;
g) Who checks required fumigation dosage rate once temperature and volume are calculated?;
h) How is it established that circulation fans within the unit are working prior to fumigant entry into the chamber/tent?;
i) Who is responsible for checking the correct amount of fumigant is entered into the chamber/tent?;
j) What procedures are applied to ensure no leaks from the chamber or tent are evident?;
k) What period of time after initial fumigant is released into the chamber/tent will verification readings be made and using what type of equipment?;
l) Calibration of gas measuring equipment is undertaken how frequently and who does this?;
m) Calibration details are recorded where?;
n) At completion of intended treatment, who undertakes verification of gas retention rates, who records this, and where are these records held on file?;
o) Who has the authority to sign off the treatment certificates to enable release of produce?;
p) How is product identified as being treated?

NOTE: Regional Export Managers may approve variations to the above documentation requirements to suit a particular state's operating requirements.

6.6.1.2 Department of Agriculture supervision

Flexible tents - Department of Agriculture inspection staff will attend all fumigations being undertaken for NZ BQA. Inspection staff will attend either at commencement of fumigation or prior to completion. The Department of Agriculture will verify treatment dosages, calculations and gas retention general process controls.

Fixed capacity (chambers or fixed tents) -Treatment centres will be supervised at the commencement of the season, and then, providing substantial compliance is attained 2 - 3 times during the season.

Fumigation centres must advise their regional Department of Agriculture office 24 hours in advance of intended fumigation treatments. If the Department of Agriculture is unable to attend at the required times, arrangements can be made to allow treatment to go ahead but define how the Department of Agriculture will manage the supervision requirements.

NOTE: After treatment all product must be identified as 'treated' for identification and traceability purposes.

6.6.2 Appendix 4 – Dimethoate

6.6.2.1 General requirements

Table 5 PERMITTED DIMETHOATE DIPPING/SPRAYING REGIMES

Commodity	Dip strength	Tolerance	Dip/spray	Time
Rockmelon	400ppm	±6% (± 24 ppm)	Dip	Submersed for at least 1 minute
Honeydew melon	400ppm	±6% (± 24 ppm)	Dip	Submersed for at least 1 minute

Note: The minimum tolerance for dimethoate sample results is 376 ppm. Treatment centres will be suspended if samples fall below this level. Treatment centres will only be re-instated once an audit has been conducted to identify the cause of the low concentration. Adequate corrective actions must be documented and instigated by the treatment facility. Reinstatement will occur when the Department of Agriculture has confirmed the adequacy of corrective actions and when the Department of Agriculture is in receipt of a conforming dimethoate sample.

Treatment facilities must maintain documented systems. Systems will include:

a) Chemical to must be used by expiry date;
b) Chemical to be stored at temperatures below 40 °C. It has been determined when temperatures rise above 46 °C (for even 1 day), the active ingredient will degrade;
c) That professional advice (laboratory/manufacturer) has been sought, if using any additives to solution, as these can accelerate the degradation of the active chemical concentrate over time;
d) Procedure that ensures that pH levels are checked and adjusted if required, before adding chemical concentrate, as alkaline conditions have an adverse effect on the solution and will increase with time;
e) All products will be free of soil;
f) The treatment must be the last process prior to packing. i.e. there will be no other washing, cleaning by brushes or fungicide treatments permitted;
g) The treatment centre will nominate a person/s to prepare and record each consignment or batch lot;
h) The treatment centre will prepare treatments immediately prior to use and have systems in place for recording solution strengths. The treatment centre will also record details of the mixing of solution and any topping up during processing which allows for chemical wash out. Details will include times and indicate volumes of product treated at the time of topping up.

Each treatment operator will be required to document their method/s of dipping and must include:

a) Size of the dip tank;
b) Method of dipping (e.g. pallets loaded so many boxes high, bins with the top layer secured by screened mesh etc.);
c) Maximum volume of water required for any/each treatment;
d) Amount of chemical needed to achieve the required ppm level active ingredient;

e) Minimum allowable solution level;
f) Maintenance of active ingredient level (i.e. 'top up' levels);
g) Treatment operators will have a system in place identifying treated and untreated products. Labels must be clear and visible on pallets/bins/crates etc;
h) After dipping, all products must be identified as being 'treated'.

NOTE: Solutions will not be allowed to be carried over to the next day/run unless the treatment centre has established systems demonstrating solution can be carried over without losing efficacy.

After treatment all product must be identified as 'treated' for identification and traceability purposes.

6.6.2.2 Waxed produce

The application of waxes or oils prior to dimethoate treatment is prohibited. For treated produce, application of waxes or oils will only be allowed at the discretion of the Export Manager.

6.6.2.3 Sampling

Due to the range of commodities exported under this appendix and their seasonal availability, all sampling regimes within the NZ BQA will be applied within the context of a calendar year (Jan –Dec).

All industry dip samples must be taken at the end of a dipping run. The Department of Agriculture samples where possible (subject to operational constraints), samples will also be taken at the end of a dipping run. This will provide assurances that all product within the dipping process has been exposed to a solution within the required concentration.

There is no requirement for Department of Agriculture inspectors to attend each dimethoate disinfestation treatment. Analysis of chemical dipping strengths, must be verified according to the following sampling guidelines:

Department of Agriculture sampling

Initial year of registration: the Department of Agriculture to be in attendance during the preparation of the first dipping solution. A Department of Agriculture dip sample will be taken from this first treatment run. Department of Agriculture dip samples must be taken during every month thereafter, while the treatment facility is dipping for export to New Zealand.

Continuous registration: Sampling may be extended to twice during dipping activities in a calendar year, provided that substantial compliance has been previously established.

Industry sampling

Monthly for the first 3 months of export activity, with one additional sample to be taken if the treatment period is greater than 4 months.

6.6.2.4 Department of Agriculture audit

One initial audit during the first 10 days of each season to verify all responsibilities are being maintained, and in the first year of operation, monthly audits during the operating season.

First year of registration: Monthly during the treatment season.

Continuous registration without non-conformance: Twice during the treatment season.

6.6.3 Appendix 5 – Cold treatment

Citrus fruits, pears, grapes and avocadoes can be treated by cold storage disinfestation for export to New Zealand.

6.6.3.1 General requirements

Exporters have the option to carry out cold disinfestation treatments on-shore immediately prior to export or in-transit in accordance with the following treatment schedules:

Table 6 APPROVED COLD STORAGE DISINFESTATION TREATMENTS

The core temperature of the fruit to be held continuously at one of the following temperature/time combinations immediately before export or in-transit.

Appendix 5–Cold treatment	Treatment rate and duration	Commodity
Standard rates	1 ºC (±0.2 ºC) for 16 days	Avocado (*Persea americana*)
	0 ºC or below for 13 days or 1 ºC (±0.6 ºC) for 16 days	Grape (*Vitis vinifera*) Pear (*Pyrus* sp.)
	0 ºC or below for 13 days or 1 ºC (±0.6 ºC) for 16 days	All *Citrus* spp. listed in IHS from all Australian areas
OR (applicable ONLY to citrus originating from fruit fly outbreaks in the area freedom districts/PFAs; Sunraysia – Victoria and New South Wales; Riverland – South Australia; Ord River Irrigation Area – Western Australia		
5a	**(Contingency treatment for Queensland fruit fly (*Bactrocera tryoni*) outbreak in a PFA).** 3 °C (±0.5 ºC) for 14 days	Grapefruit (*Citrus paradisi*) Lemon (*Citrus limon*)
5b	**(Contingency treatment for Queensland fruit fly (*Bactrocera tryoni*) outbreak in a PFA).** 3 °C (±0.5 ºC) for 16 days	Mandarin (*Citrus reticulata*) Orange (*Citrus sinensis*) Tangerine (*Citrus reticulata*) Tangor (*Citrus reticulata* x *sinensis*)
5c	**(Contingency treatment for Mediterranean fruit fly (*Ceratitis capitata*) outbreak in a PFA).** 2 °C (±0.5 ºC) for 18 days or	Grapefruit (*Citrus paradisi*) Mandarin (*Citrus reticulata*) Orange (*Citrus sinensis*) Tangerine (*Citrus reticulata*) Tangor (*Citrus reticulata* x *sinensis*)

Appendix 5–Cold treatment	Treatment rate and duration	Commodity
	3 °C (±0.5 ºC) for 20 days	
5d	**(Contingency treatment for Mediterranean fruit fly (*Ceratitis capitata*) outbreak in a PFA)** 2 °C (±0.5 ºC) for 16 days or 3 °C (±0.5 ºC) for 18 days	Lemon (*Citrus limon*)

6.6.3.2 Temperature recorders

Fruit pulp temperature recorders used for cold treatment must conform to the following requirements:

a) Able to accommodate the required number of sensors;
b) Able to record and store data for the duration of each treatment until such time the information can be examined by the appropriate authority;
c) Capable of producing, or can download the information to produce, printouts which identify each sensor, time and temperature, as well as the identification of the recording unit facility/container number where the treatment was undertaken;
d) Capable of electronically recording readings at least hourly and identifying the time of recording;
e) Capable of recording temperature data in increments of 0.1 °C.

6.6.3.3 Calibration of temperature sensors

The calibration of sensors will be conducted using a slurry of crushed ice and distilled water. At least one minute intervals between two consecutive sensor readings must be allowed during the calibration process; however these intervals must not exceed 5 minutes.

Any sensor which reads outside of the range of ± 0.6 °C from 0 °C must be replaced by a sensor that meets this criterion.

Calibration of temperature sensors must be carried out under the supervision of the Department of Agriculture, with results recorded on Form 2.15 - NZ Fruit Sensor Record of Calibration.

6.6.3.4 Loading of containers

Containers must be inspected by the Department of Agriculture or an authorised load out person prior to loading to ensure freedom from pests and to verify that all vents or other potential entry points for pests are covered. Authorised load out persons must record this container check on Form 2.12 Container Report Sheet.

Containers must be fitted with a tamper proof numbered seal placed on the container door upon completion of loading. The seal number must be noted on the Phytosanitary certificate.

6.6.3.5 On-shore cold treatments

On-shore cold treatments are only permitted to be undertaken at treatment facilities registered by teh Department of Agriculture under the NZ BQA. The Department of Agriculture will maintain records of all establishments registered for cold disinfestation.

All staff must be appropriately trained to carry out designated responsibilities.

Placement of fruit pulp temperature sensors

A minimum of three sensors, two for pulp and one for air temperature will be used for the first 250 m^3 of product or less. For each additional 250 m^3 of product, or part thereof, one additional pulp sensor will be used;

- The warmest area of each cool storage facility will be determined during the initial cooling process by the use of sensory probes/thermometers. One pulp sensor will be placed at the warmest area of the cool store. Further sensors will be placed throughout the load in locations representing different areas of the cool store, from midway to the top height of the chamber load. Cartons will be fully closed following insertion of the sensors;
- Care must be taken to ensure that the tip of the fruit pulp temperature sensors are not allowed to extend outside of the fruit.

Department of Agriculture supervision

Calibration of sensors for on-shore cold disinfestations must be carried out prior to commencement of treatment and at completion of treatments, with both calibrations supervised by the Department of Agriculture.

If as a result of re-calibration, any sensor produces a different reading than during the initial calibration, a correction factor will have to be taken into consideration when interpreting treatment read-outs. If the application of a correction factor leads to treatment parameters not having been met, the treatment will be deemed to have failed.

Where a treatment has failed, fruit may be re-treated at the discretion of the Department of Agriculture and industry. In circumstances where the Department of Agriculture has documented confirmation that the conditions of the treatment schedule have been maintained since treatment cessation, the treatment may be allowed to continue. Data collection must continue from the time of reconnection of the recording device.

The treatment will be deemed to have begun by the Department of Agriculture once the chamber has stabilised and all sensors have attained the required treatment temperature.

The Department of Agriculture will verify, stamp and sign satisfactorily completed treatment records. Both the Department of Agriculture and the treatment facility are to maintain copies of the treatments on file.

Record requirements

Temperature records will be retained and made available for auditing purposes by Department of Agriculture /New Zealand Ministry for Primary Industries (MPI) upon request, details of records must include:

a) Date and results of temperature sensor calibrations;
b) Date chamber was loaded with produce;
c) Type and variety of produce treated, the quantity by lots involved, all to be identified by grower, packhouse and exporter;
d) Continuous print out records oftemperatures within the chamber throughout the treatment program;
e) Date produce was cleared from chamber with details of post treatment security and dispatch of produce;
f) Date and results of re-calibration of sensors following completion of treatment;
g) Continuous - electronic data log sheets for each cold treatment;
h) All treated product must be labelled as treated to ensure traceability.

Temperature records will be retained and made available for auditing purposes by Department of Agriculture/MPI upon request.

NOTE: After treatment all product must be identified as 'treated' for identification and traceability purposes.

6.6.3.6 In-transit cold treatments

In-transit cold disinfestations treatments may only be carried out in self refrigerated (integral) shipping containers. These containers must be capable of achieving and maintaining the required cold disnfestation schedules in accordance with the SOM.

Placement of temperature sensors

Containers must be packed in a manner which ensures that there is even airflow under and around all pallets and any loose stacked cartons. Care must be taken to ensure that the tip of the fruit pulp temperature sensors, are not allowed to extend outside of the fruit.

Records of fruit pulp temperatures are required from at least three locations. Sensors will be placed into average sized fruits under Department of Agriculture supervision as follows:

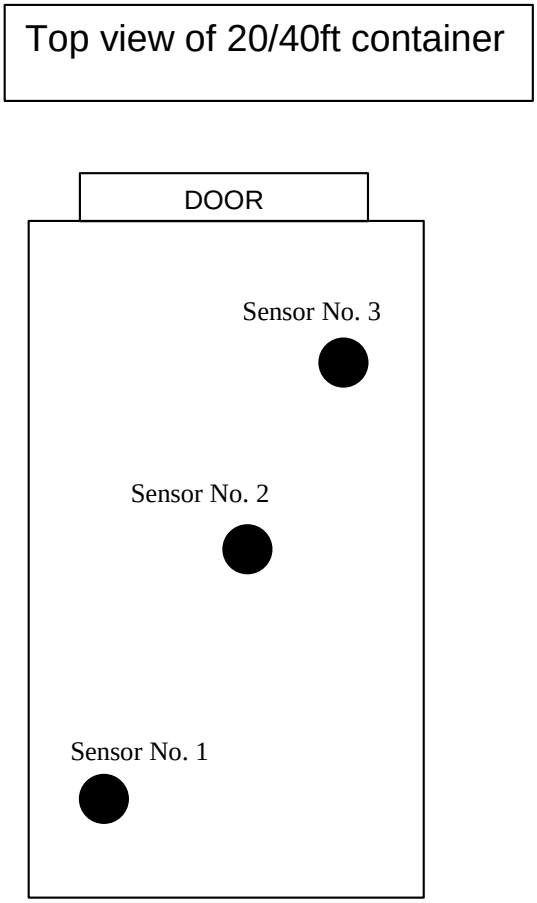
- The sensors must be placed in the following locations in a 40 foot container:
    - Sensor No 1: 1st pallet row, 2-3 cartons down from top, 2-3 cartons in from right side
    - Sensor No 2: 5th pallet row, 4-5 cartons down from top, 3-4 cartons in from left side
    - Sensor No 3: 9th pallet row, 6-7 cartons down from top, 2-3 cartons in from left side.

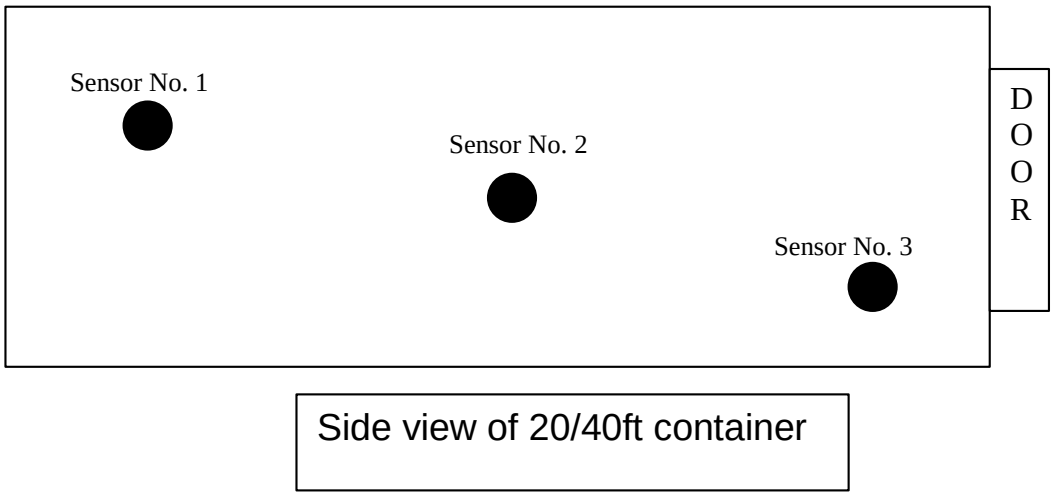
- The sensors must be placed in the following locations in a 20 foot container:
    - Sensor No 1: 1st pallet row, 2-3 cartons down from top, 2-3 cartons in from right side,
    - Sensor No 2: 3rd pallet row, 4-5 cartons down from top, 3-4 cartons in from left side,
    - Sensor No 3: 5th pallet row, 6-7 cartons down from top, 2-3 cartons in from left side.

On completion of treatments, printouts (or electronic equivalent) of all temperature sensors will be made available to the MPI officer at the port of arrival for final clearance of the container.

Attachment to section 6.6.3.6

SCHEMATIC VIEW OF PLACEMENT OF TEMPERATURE PROBES FOR IN-TRANSIT COLD TREATMENT OF FRUIT FLY HOST COMMODITIES FOR EXPORT TO NEW ZEALAND





Side view of 20/40ft container

NOTE: Any container openings must be covered or fitted with fruit fly proof mesh to prevent the entry of pests. Mesh or gauze with openings ≤ 1.6 mm is acceptable.

6.6.4 Appendix 12 – Irradiation

Refer to section 2.13 Irradiation, for information specifically relating to the approved treatment rates for individual commodities.

The Food Standards Australia & New Zealand (FSANZ) standard for irradiated fresh produce commodities for phytosanitary pest disinfestation has a maximum absorbed dose (Dmax) of 1000 Gy (1 kGy). The requirements (including mandatory labelling) set by FSANZ are applicable for commodities treated under this pathway, these requirements can be found at www.foodstandards.gov.au and www.foodsafety.govt.nz.

Treatment centres will be required to carry out verification testing to determine the required response on target organisms has been achieved in accordance with International Standard Phytosanitary Measures (ISPM) # 18 - *Guidelines for the use of irradiation as a phytosanitary measure* (www.ippc.int). The records of this verification must be made available to the Department of Agriculture/MPI upon request.

Ionizing radiation may be provided by radioactive isotopes (gamma rays from cobalt-60), electrons generated from machine sources (up to 10 MeV), or by x-rays (up to 5 MeV) (limits set by Codex Alimentarius). The unit of measurement for absorbed dose is gray (Gy).

Treatment procedures must ensure the minimum absorbed dose (Dmin) is fully attained throughout the commodity to provide the prescribed level of efficacy. Owing to the differences in the configuration of treatment lots, higher doses may be required to ensure the Dmin is achieved throughout the configured consignment or lot.

NOTE: After treatment all product must be identified as 'treated' for identification and traceability purposes.

6.6.4.1 Dosimetry

Dosimetry ensures the required Dmin for a particular commodity was delivered to all parts of the consignment. The following conditions for dosimetry systems must be in place:

a) Capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax);
b) Calibrated in accordance with international standards or appropriate national standards (ISO/ASTM 51261 "Selection and Calibration of Dosimetry Systems for Radiation Processing", ISO/ASTM 51204 "Dosimetry in Gamma Irradiation Facilities for Food Processing" and ASTM guide - F1355 "Irradiation of Fresh Fruits as a Phytosanitary Treatment", and ISPM 18);
c) Appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
d) Evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
e) Consider variations due to density and composition of the material treated, shape and size, orientation of the product, stacking, volume and packaging;
f) Dose mapping of the product in each geometric packing configuration, arrangement and product density used during routine treatments must be carried out prior to the approval of the facility. Only configurations approved by the Department of Agriculture can be used for actual treatments;
g) All components of the dosimetry system must be calibrated according to documented standard operating procedures. An independent organisation recognized by the Department of Agriculture should assess performance of the dosimetry system;
h) An accurate measurement of absorbed dose in a consignment is critical for determining and monitoring efficacy and is part of the verification process. The required number, location and frequency of these measurements should be prescribed based on the specific equipment, processes, commodities, relevant standards and phytosanitary requirements.

6.6.4.2 Dose Mapping

a) Dose mapping studies must be conducted to fully characterize the dose distribution within the irradiation chambers and commodity, and demonstrate the treatment consistently meets the prescribed requirements under defined and controlled conditions. Dose mapping data from a minimum of three runs on any particular configuration must be provided to the Department of Agriculture for verification of Dmin points etc. A minimum of three runs in a physical configuration is required for verification of Dmin (standard);
b) Dose mapping must be done in accordance with documented (proven) standard operating procedures. The information from the dose mapping studies is used in the selection of locations for dosimeters during routine processing;
c) Independent dose mapping for incomplete (partially-filled) as well as first and last process loads is required to determine if the absorbed-dose distribution is significantly different from a routine load and to adjust the treatment accordingly.

6.6.4.3 Facility records and traceability

Treatment facility operators must keep and maintain records addressing the areas listed below:

a) Appropriate treatment records for phytosanitary purposes must be kept by the irradiation facility to ensure traceability of treated lots. Records for every treatment must be kept;
b) Dosimetry records must be kept by the treatment facility for at least one full year after treatment. Records must be made available to the Department of Agriculture on request.

Records kept by treatment centres should also address the following:

a) Identification of facility and responsible parties;
b) Purpose of treatment;
c) Target regulated pest(s);
d) Lot size, volume and identification, including number of articles or packages;
e) Identifying markings or characteristics;
f) Quantity in lot;
g) Absorbed doses (target and measured);
h) Date of treatment;
i) Observed deviations from treatment specification.

6.7 Table grape fumigation requirements – Treatment for disinfestation of redback spiders - *Latrodectus hasselti*

6.7.1 General requirements

The New Zealand Ministry of Health have declared Australian redback spiders a pest of human health concern.

MPI have directed the Department of Agriculture to either undertake stringent field control programs to eliminate this pest or an agreed treatment effective against redback spiders. The Australian tablegrape industry has opted for mandatory fumigation using a sulphur dioxide–carbon dioxide treatment.

In addition to treatment centre registration, fumigators must be licensed by their appropriate State Department Authority for the use of sulphur dioxide-carbon dioxide fumigants.

Treatment centres carrying out fumigations on tablegrapes must meet the general requirements outlined above for treatment centres and the listed criteria detailed in Section 6.6.1 of the SOM.

6.7.2 Treatment

The mandatory fumigation treatment for redback spiders is a **mixture of 1 per cent sulphur dioxide (SO_2) with 6 per cent carbon dioxide (CO_2) at ambient temperature (above 18 °C) for a period of 30 minutes.**

1 per cent sulphur dioxide equals 27.174 grams of sulphur dioxide per cubic metre.
6 per cent carbon dioxide equals 109.69 grams carbon dioxide per cubic metre.

Department of Agriculture inspection staff must sight fumigation treatment records to enable phytosanitary certification of table grapes.

6.7.3 Traceability

If a live redback spider is detected during inspection, systems must be in place to allow trace back to individual fumigation treatments.

6.7.4 Additional precautionary measures

Unused packaging carried over to the following season presents an additional pathway for the introduction of redback spiders into New Zealand.

When carrying unused table grape packaging over, either pest-proofing or disinfestation of the packaging is necessary.

SECTION 7 EXPORTER RESPONSIBILITIES

7.1 General requirements

All exporters of NZ BQA products must be registered with the Department of Agriculture. Exporter applications (Attachment 2.5) will be made to the appropriate regional Department of Agriculture office.

Applications for registration will include details of the commodities and treatment pathways the exporter intends to use to meet with conditions stipulated in the SOM.

The Department of Agriculture will accept the application if details of treatment centres are not known at the time, but exports of the particular commodities will not be permitted until relevant information is provided to the Department of Agriculture.

Exporters are responsible for ensuring that all parties engaged as part of their export pathway, are registered by the Department of Agriculture (where applicable) for specific purposes in accordance with the SOM.

Regional Department of Agriculture offices will endorse BQA registration forms once a registration status has been granted. The endorsed forms will be held by the issuing Department of Agriculture office, with a copy provided to the applicant.

Exporters engaging a BQA registered party, must have a copy of the endorsed Department of Agriculture registration form on file for auditing purposes. Failure by an exporter to engage a Department of Agriculture registered party for specific purposes in accordance with the SOM, may result in a suspension of their export registration status.

Exporters must ensure at all times either directly or by delegation:

a) Product security during loading, transport and export consignment consolidation is not compromised and there can be no substitution or cross infestation of product following treatment;
b) Exporter inspection requirements as detailed in the SOM are performed by qualified staff and records are kept for all inspections performed;
c) Inspection records are given for each grower line presented for Department of Agriculture inspection;
d) Liaison with Department of Agriculture /State Officers takes place as necessary to advise of product movement and inspection requirements;
e) Documentation, including phytosanitary certificate endorsements are maintained.

7.2 Exporter Inspection

The exporter (or exporter delegate) must perform a grower line inspection on all consignments being exported to New Zealand, with full details of the inspection to be recorded (Attachment 2.6). A copy of grower line inspection records must be presented to staff at the time of Department of Agriculture inspection.

Exporter inspections must be undertaken at an appropriate sampling rate, as given in *Table 1* of the SOM. Exporters need to ensure all staff they delegate inspection duties to, have been audited and approved by the Department of Agriculture.

If the exporter (or exporter delegate) opts for the Department of Agriculture to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of the Department of Agriculture inspection.

During exporter inspections, any soft, bruised, rotted, holed or punctured products will be cut to determine evidence of fruit fly infestation. Results of products cut will be noted on the inspection record. A copy of this record must be presented with the consignment for Department of Agriculture inspection. Inspection records together with other documentation relating to the consignment must be held on file for 2 years and is subject to Department of Agriculture /New Zealand Ministry for Primary Industries (MPI) audit.

All inspections, will be performed in an area with a minimum lighting of 600 lux and include the use of magnifying lens x10.

NOTE: Accredited establishments are not required to undertake end-point inspections if procedures enable a 600 unit in-line inspection and the establishment has field control programs, receival inspections and sorter and grader assessments as part of their quality manual.

7.2.1 Split consignment inspections

Following exporter/ED grower line inspections, exporters can elect a Department of Agriculture ‘consignment’ inspection even if the ‘consignment’ is to be split to varying destinations and differing times to New Zealand.

Where this procedure is adopted, the exporter will maintain consolidated records for all 'consignment' inspections and detail how each inspected 'consignment' was distributed, including the distribution of any produce not forwarded to New Zealand (that is, sold on the domestic or other export markets). New Zealand will inspect as individual consignments on arrival.

NOTE: ‘Split consignment’ procedures cannot be implemented until the Department of Agriculture has approved the necessary documentation and record keeping systems.

Exporters/importers wanting to reduce MPI on arrival inspections of split consignments must adopt a system which fully documents the management procedures. Any procedure must include:

a) Notification of consignment details to MPI as they occur;
b) New Zealand communication links (importer and MPI contacts);
c) Flow chart detailing how the phytosanitary certificate moves through the system.

7.3 Documentation

The identity of the exporter, in addition to the grower and packhouse numbers, will be included on all packages covered by the NZ BQA.

A declaration to this effect will be made on the Notice of Intention to Export (Export Permit) (EX28), or EX186 (if appropriate), or in the Exporter Declaration/Comments box in an RFP as follows:

> "The produce covered by this permit has been inspected on a grower line basis (or equivalent) for those quarantine pests categorised by NZ MPI and specified tolerances have not been exceeded"

It is important that all manual phytosanitary certificates are given a unique number. Where several export consignments are drawn from a single EX28, the exporter must maintain a documented link to the EX28. This system must be approved by the Regional Export Manager.

Trace back for electronic phytosanitary certificates drawn from several RFPs is obtained through the EXDOC system.

7.4 Rejected produce

If any stages of live fruit fly are found during an exporter/ED inspection, all produce from that grower line (even if previously passed but not shipped) will be securely segregated from all other NZ BQA produce, and identified as not suitable for export to New Zealand unless treatment is available under Appendix 12 (select commodities).

The exporter or ED must immediately notify the Department of Agriculture of the detection.

The Department of Agriculture will formally advise and suspend the relevant treatment centre pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for live fruit fly detection, reinstatement for the NZ BQA may be permitted.

Should during the exporter/ED inspection, detection be made of Risk Group 2 pests, the exporter will immediately advise the Department of Agriculture. The product must be identified as failed for export to New Zealand and segregated from all other NZ BQA products. Reconditioning of consignment may occur where applicable.

The Department of Agriculture will formally advise and suspend the relevant grower pending an audit. Should the audit reveal deficiencies that can be corrected, or not find any substantial reason for the occurrence, reinstatement for the NZ BQA may be permitted.

The mutual fumigation recognition arrangement can be used when regulated pests are detected. This arrangement cannot be used as a pre-emptive measure.

Note: Irradiation treatment: If live arthropods (including fruit fly) are found on product that has been irradiated, this will not result in rejection of the consignment if the requisite irradiation rate has been applied (check section 2.13 for exceptions).

7.5 Security of produce

Export shipping or airfreight containers will be inspected by a freight forwarding agent where delegated or exporter for cleanliness and condition (any container openings must be covered or fitted with fruit fly proof mesh to prevent the entry of pests. Mesh or gauze with openings ≤ 1.6 mm is acceptable).

Container inspections can be delegated to a container park. Persons carrying out inspections must be audited to ensure they are aware of their responsibilities. If inspections are carried out at a container park, copies of completed inspection records must be faxed (or sent with container documents) to point of loading and retained on file by both the container park and exporter/freight forwarder etc.

NOTE: It is only necessary to complete the 'Container report sheet' for shipping containers.

All shipping or airfreight containers must be clean, structurally sound and able to protect the produce from contamination from insects and other foreign substances.

7.6 Audit

Exporters will undergo one audit per year. All relevant documentation for NZ BQA consignments must be made available to the Department of Agriculture upon request.

Records may include grower/packer registrations, delegation of exporter inspection responsibilities, delegation to perform exporter load out security requirements, records of exporter inspections and documentation (i.e. RFPs, EX186, EX28 and phytosanitary certificates).

Persons approved to act as an ED will undergo two audits per year. Audits will include documentation, knowledge of regulated pests, inspection techniques, sample selection and knowledge of relevant parts of the SOM.

NOTE: Where an exporter elects to voluntarily withdraw their registration from the BQA, a written notification of such intent must be provided to the Department of Agriculture regional office within a minimum of 10 working days prior to the date of effect.

7.6.1 Non-compliance

If minor non-compliance is detected at audit, corrective action must be taken and a follow up audit will be conducted within 7 days. If major non-compliances are detected, the Department of Agriculture Canberra office must be contacted as soon as practically possible and an assessment will be made with regards to immediate suspension until corrective action has been taken.

An exporter found to be not managing responsibilities in accordance with this manual through consistent non- compliance may be suspended from the New Zealand export program.

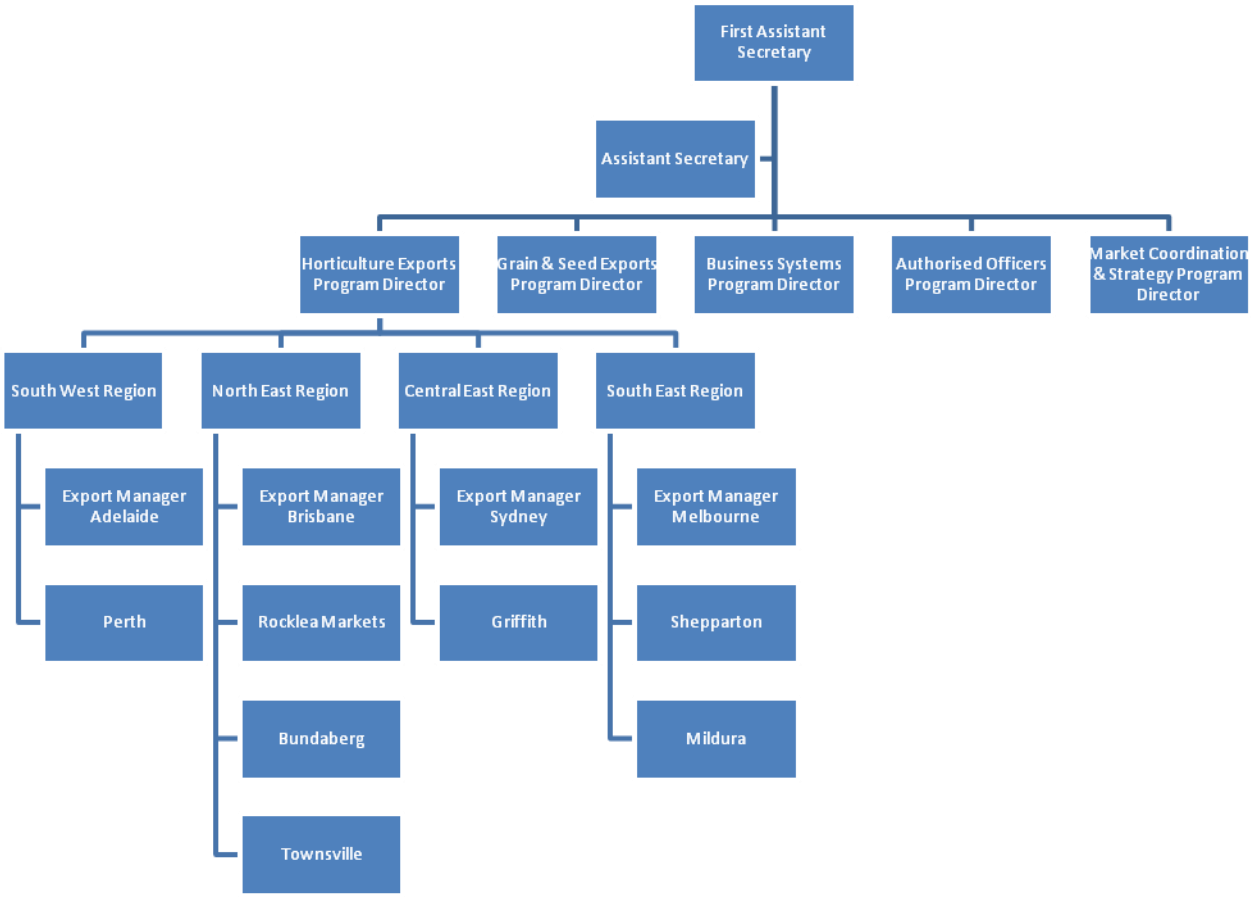
SECTION 8 GOVERNMENT RESPONSIBILITIES

This section details the responsibilities associated for participants under the SOM to ensure requirements of the SOM are adhered to.

All systems will be subject to random audits by the Department of Agriculture Canberra office and the New Zealand Ministry for Primary Industries (MPI) will audit systems at frequent intervals. The audits will include measurement of pathway compliance from growers (where required) through to final export container loading and associated documentation.

8.1 Department of Agriculture Horticulture Export Program structure

The Department of Agriculture organisation structure and management flow chart is provided below. It is recommended that each Department of Agriculture Regional office develop its own organisation structure and management flow chart as it will apply to the management of the NZ BQA, and include this information for distribution within that state.



8.1.1 Director – Horticulture Export Program

Will be responsible for ensuring;

a) All components of the SOM are being complied with consistently, over all commodities and treatments through all states;

b) Regular audits of State Departments (where applicable) and Department of Agriculture systems are conducted by the Department of Agriculture Canberra Office to ensure compliance with the conditions and requirements of the NZ BQA and that a proper record management system is available and easily accessible;
c) The Department of Agriculture Regional offices are conducting audits of AA as detailed in the "*AQIS Audit Policy for Inspection and Export Certification of Prescribed Goods (Fresh Fruits and Vegetables) Subject to the New Zealand Bilateral Quarantine Arrangement*" OPS Ref. No: E/5004/AP and the requirements of the NZ BQA and this manual;
d) Where non- compliances are found, that suitable corrective action is undertaken and verified by the Department of Agriculture;
e) Collate and circulate up to date national lists for specific commodities of registered growers, packers, and of all treatment centres and exporters;
f) That all amendments to this manual are completed promptly and amendments are distributed and acknowledged by holders of the controlled copies;
g) That audits of the South Australia, Victoria and New South Wales State Departments of Agriculture (or their equivalants) fruit fly area freedom trapping and monitoring regimes are conducted at a frequency that ensures confidence in the Department of Agriculture area freedom certification.

8.2 Department of Agriculture Regional Offices

Department of Agriculture regional offices, through the Regional Managers and Export Managers located in Queensland, New South Wales, Victoria, Northern Territory, Western Australia, Tasmania and South Australia are responsible for the following:

a) The daily management and supervision where required, of all components of the NZ BQA and the directions given in the SOM;
b) Ensure all exporters, treatment centres, packhouse and growers (where applicable), are meeting the requirements of the NZ BQA and the directions contained in the SOM;
c) Ensure inspection staff are trained in the terms, responsibilities, and conditions for all NZ BQA commodities being exported from that state;
d) Ensure all required components of the export pathways for commodities are registered for that state;
e) Ensure audits (including internal audits), are being conducted at the correct frequency and the measurement of the system and corrective action where required, has been effected and recorded;
f) Ensuring Canberra Office (Horticulture Export Program Director) is informed where any breaches of the conditions of this manual are observed;
g) Ensuring all inspectors in their state, involved in the NZ BQA export pathways, are immediately informed of any conditions and/or restrictions when fruit fly outbreaks are reported in any district of Australia;
h) Develop a system of recording registrations, and that such records are maintained so they are auditable;
i) Ensuring the Canberra office has copies of all registered elements of the export pathways (as required) and is forwarded details of any amendments to these lists.

8.2.1 Registration requirements

Department of Agriculture offices will implement a registration system where applicable for all growers, packhouses, treatment centres and exporters.

8.2.2 Sampling requirements

For the purpose of the treatments detailed in this manual the decision on whether to inspect produce before or after the appropriate treatment can be made by the relevant exporter/inspector to suit local requirements.

8.2.3 Department of Agriculture inspection procedures

Exporters will provide Department of Agriculture with exporter/ED inspection records prior to inspection. If all export documentation is not provided or incomplete, the consignment will not be inspected.

If the exporter (or exporter delegate) opts for Department of Agriculture to carry out a consignment line inspection, copies of grower line inspection records must be presented to staff at the time of Department of Agriculture inspection.

Inspections performed by the Department of Agriculture will be recorded on 'Inspection Record - New Zealand' (Attachment 2.6).

NOTE: Alternative types of inspection records can be used as long as they contain the information supplied on the inspection record

Department of Agriculture inspectors must conduct inspections at the same sampling rate (Table 1) undertaken by the exporter/ED.

For inspection on a consignment basis, produce can be from multiple grower/packer combinations but will belong to only one treatment pathway.

Packaging must be checked during the inspection for compliance with the *Export Control (Plants and Plant Products) Orders 2011* and requirements of the SOM.

NOTE: Department of Agriculture will lift 5 per cent of all calyces in citrus fruit for the determination of freedom from mealybugs, an RG1 pest.

On the irradiation pathway, Appendix 12, inspection may be conducted pre treatment OR post treatment.

8.2.4 Consignment line samples

Following exporter/ED inspections, exporters are permitted to present consignment lines to the Department of Agriculture for inspection and phytosanitary certification. Consignment lines consist of commodities from a common treatment pathway (can be different growers).

Where there is more than one grower or commodity presented for Department of Agriculture inspection, the inspector should select sample cartons on the basis of the commodities which may

present the greatest risk. The following points may be taken into account in determining selection of sample cartons:

- From the grower submitting the largest grower line within the consignment
- From the commodity comprising the greatest quantity in the consignment line
- At least one carton from the commodity seen to present the greatest quarantine risk
- At least one carton from any known 'poorer'performing growers/packers or from a newly registered grower or packer.

Consignment lines passed after 'inspection will be identified as 'Passed for New Zealand' and immediately segregated. It is recommended exporters implement a system (i.e. stickers on pallets) to make identification of passed consignments easier.

8.2.5 Rejection procedures

A rejection upon inspection by Department of Agriculture of either a consignment or grower line does not necessarily indicate a packhouse or grower has breached the conditions of the NZ BQA. However the rejection does indicate a possible problem within the packer/exporter system and will be recorded.

All rejections are to be recorded on Department of Agriculture Form EX161 (Inspection Advice) and must detail the grower, packer and export pathway through which the commodity has passed.

Exporters/EDs who fail two inspections in any one season must be audited immediately. This will ascertain any reasons the Department of Agriculture may consider necessary for suspension or corrective actions to be undertaken.

The following conditions will apply for Department of Agriculture inspection rejected products:

Any rejection for RG3 pests - Immediate suspension of treatment centre (if inspection was undertaken post-treatment), and the possible suspension of other elements of the export pathway as may be determined by audit. In the case of 'Area Freedom', all districts in that state are suspended. Audit/s must be undertaken at the earliest opportunity.

- Under the irradiation pathway, Appendix 12, the detection of an RG3 pest does not result in the suspension of the treatment centre. Irradiation at 150 Gy is deemed effective for RG3 pests.

Any rejection for RG2 pests – Department of Agriculture Canberra office to be informed immediately to consider if audit of grower, packer, exporter or ED is necessary. This may depend on type and quantity of infestation detected. If applicable, the exporter can choose to undertake corrective action (i.e. treatment, withdrawal of the offending grower). e-inspection must be conducted by exporter/exporter's delegate prior to presenting for Department of Agriculture inspection.

- Under the irradiation pathway, Appendix 12, the detection of an RG2 pest does not result in the requirement to undertake corrective action, (except where an RG2 vector is detected).

Any rejection for RG1/regulated pests - The consignment can be totally withdrawn or corrective action undertaken. Corrective action can include treatment, withdrawal of the offending grower. Re-

inspection must be conducted by exporter/exporter's delegate prior to presenting for Department of Agriculture inspection.

- Under the irradiation pathway, Appendix 12, the detection of an RG1 pest does not result in the requirement to undertake corrective action, (except where an RG1 vector or a pathogen is detected). If an RG1/regulated pest under the irradiation pathway is detected at Department of Agriculture inspection, pre or post treatment, 400 Gy will be required to be applied to the consignment as an effective treatment.

8.3 Audit

Department of Agriculture inspection staff will conduct audits of applicable growers, packhouse, treatment centres, exporters and exporter's delegates to ensure compliance with relevant section of this manual.

8.3.1 Audits after product rejections by the Department of Agriculture

Should an audit be considered necessary after rejection by a Department of Agriculture officer, the following details will be investigated:

a) Exporter/delegate inspection records;
b) Grower pest monitoring records and pest control diaries (commodity specific);
c) Packer training and associated pest identification;
d) General hygiene of premises;
e) Segregation and identification of produce;
f) Staff responsibilities;
g) Exporter or exporter's delegate inspection procedures and pest/weed identification skills.

Should auditing fail to identify any breach of the NZ BQA and responsibility of the SOM, all parties will be reinstated.

Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to the Export Manager who will co-ordinate necessary action and advise all parties at the earliest opportunity.

Copies of any audit will be given to the relevant components of the pathway audited and kept on file.

Inspectors undertaking these audits must be appropriately trained and accredited.

Table 9 DEPARTMENT OF AGRICULTURE AUDIT FREQUENCY

	Initial Year of registration	Continuous Registration	Winter Window
Grower	Initial audit prior to export + One additional audit during export period within calendar year	One audit early in new export period (no initial audit required)	Monthly audits of property & spray diaries * Audits extended to 2 monthly if substantial compliance is shown
Packer	Initial audit prior to export + One additional audit during calendar year	Minimum one audit annually	
Treatment Centre	Monthly audits required in first year Dimethoate - One initial audit during the first 10 days of season + monthly audits for remainder of calendar year whilst conducting treatments Irradiation – One intial audit during the first 10 days of season + two audits for remainder of calendar year	Fumigation - One annual audit in first 10 days of export period (to be conducted during a treatment) + 2-3 times during remainder of treatment period within calendar year Cold Storage – One annual during first 3 treatments Dimethoate – Two audits per calendar year if substantial compliance is shown Irradiation – Two audits per calendar year if substantial compliance is shown	
Exporter Delegate	Initial audit prior to export + One additional audit during remainder of calendar year	Minimum two audits per year If fail at two Department of Agriculture end point inspections, immediate audit required	
Exporter	One audit Annually	One audit Annually	
Crop monitor	One Audit Annually	One audit Annually	

8.4 Fruit fly area freedom – State Departments

State Departments are responsible for the following:

a) Where required, ensure the implementation of fruit fly trapping, monitoring and surveillance is being performed in accordance with the requirements of individual state management plans (as submitted to MPI), the *Code of Practice for the Management of Queensland Fruit Fly*, and the requirements of MPI Biosecurity Authority Standards 158.03.06 and 158.03.07; and
b) Report any detections of economically significant fruit fly species found within trapping grids to the Department of Agriculture Canberra Office within 24 hours of identification.

8.4.1 Validation of area freedom

The following procedures are undertaken to validate area freedom:

a) Maintenance of on-going fruit fly monitoring and records to demonstrate area freedom. The procedures and controls are documented such that they can be readily demonstrated to, and audited by the Department of Agriculture Canberra Office and MPI to meet the stipulated Australian and New Zealand Standards;
b) Internal quarantine arrangements to restrict the movement of fruit flies and untreated host material into the free area, with appropriate legislation to back up the monitoring program, and to enforce the internal quarantine security at all times;
c) Trapping and monitoring programs as recommended in the *Code of Practice for the Management of Queensland Fruit Fly* and managed under the tri-state agreement between the states of New South Wales, Victoria and South Australia and;
d) Reflect the requirements of New Zealand MPI Biosecurity Authority Standard 158.03.06., the Control of Fruit Flies within a Geographical Area of a Country where Fruit Flies are known to occur and/or;
e) Management and control procedures for each area which have been accepted by MPI as meeting all the requirements (or equivalence) with the MPI Biosecurity Authority Standard 158.03.06;
f) State Departments must advise the Department of Agriculture Canberra Office of any amendments to their management procedures at the earliest opportunity. Canberra Office will forward amendments to MPI. Canberra will audit the management practices for fruit fly trapping on a regular basis (minimum annually), against the current copy of the State Department procedures documents, the *Code of Practice for the Management of Queensland Fruit Fly* and where applicable MPI Biosecurity Authority Standard 158.03.06.

8.4.2 Trapping

All trapping grids for fruit fly control on the Australian mainland (where area freedom has been approved) must be performed as detailed in the *Code of Practice for the Management of Queensland Fruit Fly*.

The servicing and inspection frequency will be as directed in the *Code of Practice for the Management of Queensland Fruit Fly*.

Trapping in Tasmania is centred on ports and airports to detect the entry of any flies that may have been transported from the mainland. A total of 650 Jackson traps baited for Queensland fruit fly and Mediterranean fruit fly are located in these areas.

ATTACHMENT 1 NEW ZEALAND PEST LISTS

AVOCADO

Persea americana

Avocadoes can be exported to New Zealand under Appendices 2 (Area Freedom) and 5 (cold storage disinfestation) to the NZ BQA.

Growers and packhouse must be registered to grow and pack avocadoes for export to New Zealand because of the orchard management controls that must be implemented for the Risk group 2 pests *Pseudocercospora purpurea* (cercospora spot blotch (CSB)) and sun blotch viroid (SBV).

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Fungus

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Pseudocercospora purpurea

Virus

avocado sun blotch viroid

Quarantine: Risk group 1 pests (actionable): Nil permitted in ≤ 600-unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Mesolita lineolata	longhorn beetle
Prosoplus torosa	longhorn beetle
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Poneridia australis	fig beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Leptopius tetraphysodes	fruit tree root weevil
Leptopius tuberculatus	fruit tree root weevil
Neomerimnetes flindersiae	weevil
Paleticus sp.	avocado bark beetle
Sternocorynus sp.	weevil
Scarabaeidae	
Anoplognathus punctulatus	scarab beetle
Diphucephala spp.	green scarab beetles
Protaetia fusca	mango flower beetle
Tenebrionidae	
Lagria cyanea	honeybrown beetle
Unknown Coleoptera	
Isacantha rhinotioides	belid beetle
Diptera	
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	
Amblypelta lutescens	fruit-spotting bug
Amblypelta nitida	fruit-spotting bug
Dasynus fuscescens	fruit-spotting bug
Mictis caja	fruit-spotting bug
Lygaeidae	
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Oxycarenus luctuosus	cotton seed bug
Miridae	
Helopeltis sp.	mirid
Pentatomidae	
Plautia affinis	green stink bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Coccidae	
Ceroplastes rubens	red wax scale

Diaspididae	
Abgrallaspis cyanophylli	cyanophyllum scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Fiorinia fioriniae	fiorinia scale
Flatidae	
Siphanta galatea	planthopper
Hymenoptera	
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Geometridae	
Cleora inflexaria	grey looper
Cleora repedita	looper
Ectropis camelaria	ectropis looper
Eucyclodes pieroides	bizarre looper
Gymnoscelis lophopus	looper
Lophodes sinistraria	brown looper
Lymantriidae	
Acyphas leucomelas	omnivorous tussock moth
Euproctis lutea	Turkestan brown-tail
Euproctis sp.	browntail moth
Olene mendosa	tussock moth
Olene ostracina	tussock moth
Orgyia australis	vapourer moth
Orgyia papuana	painted pine moth
Noctuidae	
Erygia apicalis	noctuid moth
Papilionidae	
Graphium eurypylus	palegreen triangle butterfly
Psychidae	
Oiketicus elongatus	Saunders’ case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Tortricidae	
Cryptophlebia ombrodelta	litchi fruit moth
Cryptoptila immersana	ivy leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Thysanoptera	
Thripidae	
Selenothrips rubrocinctus	redbanded thrips

Mite

Arachnida	
Acarina	
Tetranychidae	

Oligonychus coffeae	tea red spider mite

Fungus

Ascomycota
Phyllachorales
Phyllachoraceae
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)
anthracnose
Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Phomopsis perseae

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes ceriferus	Indian white wax scale
Ceroplastes destructor	white wax scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Diaspididae	
Aspidiotus nerii	oleander scale
Hemiberlesia lataniae	latania scale
Lindingaspis rossi	Ross' black scale
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Tortricidae	

Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Eotetranychus sexmaculatus	sixspotted mite
Tetranychus urticae	two-spotted spider mite

Fungus

Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi)*	
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea)*	ear rot

Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	stem-end rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	

Non-regulated non plant pests/organisms

None

BANANA

Musa spp.

Bananas can be exported to New Zealand under Appendix No. 6 – Non Host Status of the NZ BQA when harvested in the unripe 'mature green' stage of maturity.

Growers and packhouses need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a regulated pest until official categorisation has been determined by the Department of Agriculture/MPI.

***Maconellicoccus hirsutus* (pink hibiscus mealybug) is listed for bananas, and the Department of Agriculture can certify freedom from this pest based on the following:**

Maconellicoccus hirsutus

1. In field controls for *Maconellicoccus hirsutus* species are a requirement of grower registration, as such pink hibiscus mealybug will be controlled at the grower level.

2. If grower is not carrying out infield controls for *Maconellicoccus hirsutus* fruit will be fumigated with methyl bromide (at appropriate rates) prior to export.

3. Pre-export inspection of fruit will identify the presence of *M. hirsutus,* and the fruit would be rejected for export to New Zealand.

Regulated quarantine pests (actionable)

Pest Scientific Name	Common Name
Cercospora hayi	diamond spot
Chaetothyrina musarum	sooty blotch
Cladosporium spp.	cladosporium mould
Glomerella cingulata var. *minor (*anamorph *Collectotrichum gloeosporioides* var. *minor)*	anthracnose
*Guignardia musae (*anamorph *Phyllosticta musarum)*	freckle
Phytophthora palmivora	black rot
Ramichloridium musae	freckle
Aleurodicus dispersus	spiralling whitefly
Amblypelta lutescens	fruit spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Araecerus coffeae	coffee bean weevil
Aspidiotus destructor	coconut scale
Atherigona orientalis	muscid fly
Bactrocera bryoniae	**fruit fly #**

Bactrocera musae **#**	**banana fruit fly**
Bactrocera cucumis	**cucumber fruit fly #**
Bactrocera frauenfeldi	**fruit fly #**
Bactrocera jarvisi **#**	**Jarvis's fruit fly**
Bactrocera neohumeralis	**lesser Queensland fruit fly #**
Bactrocera tryoni	**Queensland fruit fly #**
Ceratitis capitata	**Mediterranean fruit fly** #
Chaetanaphothrips signipennis	banana rust thrips
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi scale	dictyospermum
Cnaphalocrocis medinalis	rice leaf folder
Dirioxa pornia	Island fruit fly
Dysmicoccus brevipes	pineapple mealybug
Elixothrips brevisetis	banana rind thrips
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth
Ferrisia virgata	striped mealybug
Geloptera miracula	chyrsomelid beetle
Haplothrips gowdeyi	black flower thrips
Helicoverpa assulta	cape gooseberry budworm
Hemiberlesia palmae	citrus black scale
Icerya aegyptiaca	Eygyptian fluted scale
Icerya seychellarum scale	Seychelles
Isotenes miserana	orange fruit borer
Leptoglossus gonagra	squash bug
Maconellicoccus hirsutus	pink hibiscus mealybug #
Melanitis leda ismene	Rice butterfly
Monolepta australis	red-shouldered leaf beetle
Opogona glycyphaga	sugar-cane bud moth
Orgyia australis	vapourer moth
Pentalonia nigronervosa	banana aphid
Pinnaspis strachani	hibiscus snow scale
Planococcus citri	citrus mealy bug
Planococcus minor	passionvine mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rhyparida discopunctulata	leaf beetle
Spodoptera exigua	beet armyworm
Thrips florum	flower thrips
Thrips hawaiiensis	banana flower thrips
Tiracola plagiata	banana fruit caterpillar
Tirathaba rufivena	fruit borer
Unaspis citri	citrus snow scale
Xenothictis sciaphila	tortricid
Brevipalpus lewisi	bunch mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	vegetable spider mite

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Erwinia carotovora	bacterial soft rot
Aspergillus flavus	aspergillus storage rot
Aspergillus niger	aspergillus rot
*Ceratocystis paradoxa (*anamorph *Thielaviopsis paradoxa)*	ceratocystis rot
Colletotrichum musae	anthracnose
Deightoniella torulosa	black tip
Fusarium pallidoroseum	fusarium rot
*Glomerella cingulata (*anamorph *Colletotrichum gloeosporioides)*	anthracnose
Lasiodiplodia theobromae	fruit and stem-end rot
*Magnaporthe grisea (*anamorph *Pyricularia grisea)*	Johnson's spot
Sclerotinia sclerotiorum	cottony rot
Agrotis ipsilon	greasy cutworm
Aonidiella aurantii	California red scale
Aphis gossypii	cotton aphid
Araecerus fasciculatus	coffee bean weevil
Aspidiotus nerii	oleander scale
Chrysodeixis eriosoma	green garden looper
Coccus hesperidum	brown soft scale
Hemiberlesia cyanophylli	cyanophyllum scale
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Hercinothrips bicinctus	banana silvering thrips
Hermetia illucens	black soldier fly
Listroderes difficilis	vegetable weevil
Pseudococcus longispinus	longtail mealybug
Rhopalosiphum maidis	corn leaf aphid
Spodoptera litura	cluster caterpillar
Brevipalpus californicus	bunch mite
Polyphagotarsonemus latus	broad mite
Tetranychus lambi	strawberry spider mite
Tetranychus urticae	twospotted spider mite

Denotes high impact pest

CAPSICUM

Capsicum annuum

Capsicums can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendix 3 (fumigation) and Appendix 10 (field control programs) NZ BQA/IHS**
- **Appendix 12 (irradiation) to the NZ BQA/IHS**

A number of Risk group 2 pests are listed for capsicums, and the Department of Agriculture can certify freedom from these pests based on the following:

Bactrocera bryoniae

1. Non-host status of capsicums. It is suggested that the recorded association of this pest with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. bryoniae* should it occur.
3. Pre-export inspection of fruit will identify the presence of *B. bryoniae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. bryoniae* has never been detected on capsicum fruit during Department of Agriculture pre-export inspection.
5. Irradiation at 150 Gy is determined to be effective for all fruit flies.

Bactrocera musae

1. Mandatory spray programs using fenthion or dimethoate to control fruit fly (both registered for this purpose) will control *B. musae* should it occur.
2. Pre-export inspection of fruit will identify the presence of *B. musae*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *B. musae* has never been detected on capsicum fruit during Department of Agriculture pre-export inspection.
4. Irradiation at 150 Gy is determined to be effective for all fruit flies.

Bemisia tabaci

1. Non-preferred host status of capsicums, with infestations being very low to nil.
2. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
3. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on capsicum fruit during Department of Agriculture pre-export inspection.

***Conogethes punctiferalis* (yellow peach moth)**

1. Irradiation at 289 Gy is determined to be effective for *C. punctiferalis*.
2. Irradiation at 150 Gy is permitted where effective in-field controls have been undertaken for *C. punctiferalis*. Methyl bromide at appropriate rates (prior to export) is also an effective treatment for Lepidopteran spp.

Thrips palmi [vect]

1.	Pre-export inspection of fruit will identify the presence of *Thrips palmi* and the fruit would be rejected for export to New Zealand, or treated with methyl bromide.
2.	Historical records show that *Thrips palmi* has never been detected on capsicum fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	Northern Territory fruit fly
Bactrocera bryoniae	fruit fly
Bactrocera cucumis	cucumber fruit fly
Bactrocera frauenfeldi	fruit fly
Bactrocera kraussi	fruit fly
Bactrocera jarvisi	Jarvis's fruit fly
Bactrocera musae	Banana fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera bryoniae	fruit fly
Bactrocera musae	banana fruit fly
Homoptera	
Aleyrodidae	
Bemisia tabaci [vect.]	
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	melon thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample.

Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Tenebrionidae	
Gonocephalum carpentariae	false wireworm
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Cicadellidae	
Orosius argentatus [vect.]	common brown leafhopper
Orosius orientalis [vect.]	common brown leafhopper
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aleyrodidae	
Aleurodicus disperses	spiralling whitefly
Trialeurodes vaporariorum [strain]	greenhouse whitefly
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Coccidae	
Chloropulvinaria psidii	guava scale
Pulvinaria urbicola	cottony maple scale
Diaspididae	
Pseudaulacaspis pentagona	white peach scale
Unaspis citri	citrus snow scale
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera littoralis	cotton leafworm
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Thysanoptera	
Thripidae	

Frankliniella schultzei [vect.]	tomato thrips
Scirtothrips dorsalis [vect.]	chilli thrips

Mite

Arachnida
Acarina
Tetranychidae

Eutetranychus orientalis	pear leaf blister mite

Fungus

Ascomycota
Hypocreales
Hypocreaceae

Nectria haematococca var. brevicona	dry rot

Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae

Alternaria alternata f. sp. *lycopersici*	
Cercospora capsici	cercospora spot
Cladosporium sp.	cladosporium mould
Stemphylium solani	stemphylium spot

Tuberculariales
Tuberculariaceae

Fusarium oxysporum f. sp. vasinfectum	fusarium wilt

Pythiales
Pythiaceae

Phytophthora capsici	buckeye rot
Pythium aphanidermatum	cottony leak

Virus

capsicum chlorosis virus (CaCV)
potato spindle tuber viroid (PSTVd)
tobacco leaf curl bigeminivirus [VO]
tomato torrado virus (ToTV)
tomato yellow leaf curl virus (TYLCV)

Phytoplasmas

Tomato big bud phytoplasma (TBB)

Weed

Angiospermae
Asterales
Asteraceae

Baccharis halimifolia	baccharis
Chondrilla juncea	skeleton weed
Crassocephalum crepidiodes	redflower ragleaf

Xanthium spp. (except X. spinosum)	bur
Caryophyllales	
Amaranthaceae	
Amaranthus spp.	amaranthus
Geraniales	
Zygophyllaceae	
Tribulus spp.	caltrop
Poales	
Poaceae	
Cenchrus spp. (except C. ciliaris)	grass
Eragrostis curvula	African love grass
Eragrostis poaeoides	
Pennisetum alopecuroides	Chinese pennisetum
Pennisetum polystachion	mission grass
Phragmites spp.	grass
Sorghum halepense	Johnson grass
Sorghum x almum	Columbus grass
Solanales	
Solanaceae	
Lycium spp. *(except L. barbarum, L. ferocissimum)*	boxthorn
Solanum elaeagnifolium	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Listroderes costirostris	vegetable weevil
Listroderes difficilis	vegetable weevil
Listroderes obliquus	vegetable weevil
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	

Bemisia argentifolii	poinsettia whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Myzus persicae	green peach aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Pseudococcus longispinus	longtailed mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Pyralidae	
Sceliodes cordalis	poroporo fruit borer
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculops lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe phaseolorum (anamorph *Phomopsis phaseoli)*	phomopsis stem rot
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	

Erysiphe cichoracearum	
(anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi	
(anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella intricans	
(anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca	
(anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	
(anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	
Sclerotinia sclerotiorum	cottony rot
Mitosporic Fungi (Coelomycetes)	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum truncatum	anthracnose
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata	
(anamorph *Colletotrichum gloeosporioides*)	bitter rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	
(anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phoma destructiva	bulb rot
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum circinans	smudge
Colletotrichum coccodes	anthracnose
Colletotrichum dematium	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria longipes	alternaria spot
Alternaria solani	leaf spot
Moniliaceae	

Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora nicotianae var. parasitica	collar and root rot
Pythium irregulare	pythium root and stem rot
Peronosporales	
Peronosporaceae	
Peronospora tabacina	downy mildew

Bacterium

Corynebacteriaceae	
Clavibacter michiganensis subsp. *michiganensis*	bacterial canker
Enterobacteriaceae	
Erwinia carotovora	bacterial soft rot
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
Pseudomonadaceae	
Pseudomonas cichorii	bacterial leaf spot
Pseudomonas marginalis	bacterial spot
Pseudomonas syringae pv. *syringae*	bacterial soft rot
Pseudomonas syringae pv. *tomato*	bacterial speck
Pseudomonas viridiflava	leaf blight
Ralstonia solanacearum	bacterial wilt
Xanthomonas vesicatoria	bacterial spot
Rhizobiaceae	
Agrobacterium tumefaciens	crown gall

Virus

Tobacco ringspot nepovirus (TRSV)
Tomato spotted wilt virus (TSWV)

Weed

Angiospermae	
Asterales	
Asteraceae	
Galinsoga parviflora	
Sonchus spp.	sowthistle
Poales	
Poaceae	
Echinochloa spp.	grasses
Eleusine indica	goose grass
Pennisetum macrourum	African feather grass

Non-regulated non plant pests

None

CITRUS

Citrus sinensis (orange), C. reticulata (mandarin/tangerine), C. paradisi (grapefruit), C. limon (lemon), C. reticulata x C. paradisi (tangelo) and C. aurantiifolia (lime)

Citrus can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) to the NZ BQA/IHS.

The pest citrus leaf miner, whilst listed as a Risk group 2 pest, does not need any specific grower/orchard recorded controls as New Zealand have accepted that this pest is not a pest of the mature fruit.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera aquilonis	fruit fly
Bactrocera halfordiae	fruit fly
Bactrocera jarvisi	Jarvis's fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Insect	
Insecta	
Lepidoptera	
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Guignardia citricarpa	

(anamorph *Phyllosticta citricarpa*)

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Bostrichidae	
Bostrychopsis jesuita	large auger beetle
Buprestidae	
Melobasis purperescens	jewel beetle
Cerambycidae	
Dihammus vastator	fig longhorn
Paradisterna plumifera	speckled longicorn
Platyomopsis pulverulens	longhorn beetle
Skeletodes tetrops	longhorn beetle
Stenocentrus ostricilla	longhorn beetle
Strongylurus thoracicus	pittosporum longicorn
Uracanthus cryptophagus	citrus branch borer
Chrysomelidae	
Aulacophora hilaris	pumpkin beetle
Geloptera miracula	chrysomelid beetle
Geloptera porosa	pitted apple beetle
Monolepta australis	red-shouldered leaf beetle
Rhyparida spp.	leaf beetles
Curculionidae	
Crossotarsus subpellucidus	weevil
Eutinophaea bicristata	citrus leaf eating weevil
Leptopius squalidus	fruit tree root weevil
Myllocerus multimaculata	broadnosed weevil
Neomerimnetes sobrinus	weevil
Orthorhinus cylindrirostris	elephant weevil
Otiorhynchus cribricollis	cribrate weevil
Peripagis limbatus	weevil
Perperus augustibasis	weevil
Perperus lateralis	white-striped weevil
Pseudomydaus citriperda	weevil
Sternocorynus neglectus	weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Glycphana stolata	scarabaeid
Protaetia fusca	mango flower beetle
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Tephritidae	
Dirioxa pornia	island fruit fly
Hemiptera	
Coreidae	

Amblypelta brevicornis	fruit-spotting bug
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Pentatomidae	
Biprorulus bibax	spined citrus bug
Musgraveia sulciventris	bronze orange bug
Unknown Hemiptera	
Austropeplus sp.	citrus blossom bug
Tropidochila sordida	lace bug
Homoptera	
Aleyrodidae	
Asterobemisia helyi	whitefly
Orchamoplatus citri	Australian citrus whitefly
Coccidae	
Ceroplastes rubens	red wax scale
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Pulvinaria cellulosa	pulvinaria scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Lepidosaphes pallida	mussel scale
Pseudaonidia trilobitiformis	trilobite scale
Unaspis citri	citrus snow scale
Flatidae	
Colgaroides acuminata	mango planthopper
Siphanta hebes	moth bug
Pseudococcidae	
Ferrisia virgata	striped mealybug
Maconellicoccus hirsutus	hibiscus mealybug
Nipaecoccus viridis	hibiscus mealybug
Planococcus pacificus	citrus mealybug
Hymenoptera	
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Camponotus spp.	carpenter ants
Myrmecia spp.	bulldog ants
Lepidoptera	
Cosmopterigidae	
Cosmopteryx schismatias	leafminer
Geometridae	
Lophodes sinistraria	brown looper
Noctuidae	
Eudocima fullonia	fruit-piercing moth
Eudocima materna	fruit-sucking moth

Eudocima salaminia	fruit-piercing moth
Eudocima tyrannus	fruit-piercing moth
Ischja albata	noctuid moth
Lagoptera regia	noctuid moth
Mocis frugalis	semi-looper caterpillar
Othreis tyrranus	fruit-sucking moth
Parallelia palumba	noctuid moth
Tiracola plagiata	banana fruit caterpillar
Papilionidae	
Papilio aegeus	large citrus butterfly
Papilio anactus	small citrus butterfly
Psychidae	
Hyalarcta huebneri	leaf case moth
Oiketicus elongatus	Saunders's case moth
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Cryptoblabes adoceta	false blossom moth
Cryptoblabes hemigypsa	false blossom moth
Tortricidae	
Adoxophyes templana	leafroller
Epiphyas spp. (except *E. postvittana*)	leafrollers
Isotenes miserana	orange fruitborer
Yponomeutidae	
Prays parilis	citrus flower moth
Thysanoptera	
Phlaeothripidae	
Haplothrips gowdeyi	black flower thrips
Haplothrips victoriensis	tubular black thrips
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Megalurothrips kellyanus	thrips
Scirtothrips albomaculatus	thrips
Scirtothrips signipennis	thrips
Unknown Insecta	
Unknown Insecta	
Comana humeralis	slug caterpillar

Mite

Arachnida	
Acarina	
Eriophyidae	
Tegolophus australis	brown citrus mite
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Brevipalpus obovatus	privet mite
Tetranychidae	
Eutetranychus banksi	Texas citrus mite
Eutetranychus orientalis	pear leaf blister mite
Tetranychus neocaledonicus	Mexican spider mite

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller’s rose weevil
Maleuterpes spinipes	dicky rice weevil
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Coccidae	
Ceroplastes destructor	white wax scale
Ceroplastes sinensis	Chinese wax scale
Coccus hesperidum	brown soft scale
Coccus longulus	long brown scale
Saissetia coffeae	hemispherical scale
Saissetia oleae	black scale
Diaspididae	
Aonidiella aurantii	California red scale
Aspidiotus nerii	oleander scale
Parlatoria pergandii	chaff scale
Margarodidae	
Icerya purchasi	cottony cushion scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Ricaniidae	
Scolypopa australis	passionvine hopper
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar

Sphingidae	
Agrius convolvuli	sweet potato hornworm
Tortricidae	
Merophyas divulsana	lucerne leafroller
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Heliothrips haemorrhoidalis	greenhouse thrips
Pseudanaphothrips achaetus	thrips
Thrips australis	thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Aceria sheldoni	citrus bud mite
Phyllocoptruta oleivora	citrus rust mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Brevipalpus phoenicis	passionvine mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus urticae	twospotted spider mite

Non-regulated non-plant pests/organisms

None

CUCUMBER

Cucumis sativus

Cucumbers can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom),**
- **Appendix 11 (winter window) and Appendix 10 (field control program).**

Note: Appendix 10 and Appendix 11 are only acceptable between 1 May and 1 September.

A number of Risk group 2 pests have been listed for cucumbers. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on cucumber fruit during Department of Agriculture pre-export inspection.

Note: item 3 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that items 1, 2 and 4 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. Pre-export inspections of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
2. Historical records show that *T. palmi* has never been detected on cucumber fruit during Department of Agriculture pre-export inspection.

Note: item 1 above does not apply to cucumber fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window treatment) to the NZ BQA. It is felt however, that item 2 provides an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Cucumbers exported to New Zealand under appendices 4 and 10 to the NZ BQA are required to undergo an in-field spray program for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. kanzawai* has never been detected on cucumber fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi [vect.]	melon thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	

Curculionidae	
Diptera	
Sciaridae	
Bradysia impatiens	fungus gnat
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Homoptera	
Aphididae	
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Lepidosaphes beckii	purple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Anadevidia peponis	cucumber looper
Helicoverpa assulta	cape gooseberry budworm
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Orthoptera	
Acrididae	
Phaulacridium vittatum	wingless grasshopper
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite

Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota
Unknown Ascomycota
Hyponectriaceae
Monographella cucumerina
(anamorph *Microdochium tabacinum*)
Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Cladosporium cucumerinum
Moniliaceae

Verticillium albo-atrum [severe strain]	progressive wilt

Tuberculariales
Tuberculariaceae
Fusarium oxysporum f. sp. *melonis*
Oomycota
Pythiales
Pythiaceae

Pythium aphanidermatum	cottony leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot

Zygomycota: Zygomycetes
Mucorales
Choanephoraceae

Choanephora cucurbitarum	blight

Virus

Regulated non-quarantine pests

None

Regulated non plant pests

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name

Insect

Insecta
Coleoptera

Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Listroderes difficilis	vegetable weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	white fringed weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Acyrthosiphon pisum	pea aphid
Aphis craccivora cowpea	aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Aulacorthum solani	foxglove aphid
Brevicoryne brassicae	cabbage aphid
Lipaphis erysimi	turnip aphid
Macrosiphoniella sanborni	chrysanthemum aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Coccidae	
Saissetia coffeae	hemispherical scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Franklinella occidentalis	Western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips tabaci	onion thrips

Mite

Arachnida
Acarina

Acaridae	
Tyrophagus longior	seed mite
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Pleospora tarda (anamorph *Stemphylium botryosum*)	black mould
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	fusarium rot
Gibberella gordonia (anamorph *Fusarium heterosporum*)	mould
Gibberella intricans (anamorph *Fusarium equiseti*)	root and stem dry rot
Gibberella zeae (anamorph *Fusarium graminearum*)	mould
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	

Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phomopsis sclerotioides	
Septoria cucurbitacearum	
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum coccodes	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	
Corynespora cassiicola	leaf spot
Epicoccum nigrum	black mould
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium culmorum dry rot	
Fusarium oxysporum f. sp. *cucumerinum*	fusarium rot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium roseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Pythiales	
Pythiaceae	
Phytophthora drechsleri	
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Zygomycota: Zygomycetes	

Mucorales
Mucoraceae

Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot

Bacterium
Enterobacteriaceae

Erwinia carotovora subsp. carotovora	bacterial soft rot

Pseudomonadaceae

Pseudomonas syringae pv. lachrymans	angular leaf spot
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Viruses

Tobacco ringspot nepovirus (TRSV)
Tobacco spotted wilt virus (TSWV)

Non-regulated non plant pests

None

GRAPE
Vitis vinifera

Grapes can be exported to New Zealand under appendices 2 (fruit fly area freedom), 5 (cold storage disinfestation) and 12 (irradiation) to the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of sulphur dioxide and carbon dioxide fumigation for redback spiders as detailed at Section 11 of this Manual.

NOTE: For information on the irradiation pathway please see Attachment 3 – Addendum to BQA SOM 6E – Table Grapes – Irradiation option

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Growers and packhouse must be registered to grow and pack grapes for export to New Zealand because of the vineyard management controls for the Risk group 2 pests *Conogethes punctiferalis* (yellow peach moth). The Department of Agriculture will be certifying Southern State grapes area free for the Risk group 2 pest *Maconellicoccus hirsutus* (pink hibiscus mealybug).

Regulated pests (actionable)

Quarantine: Risk group 3 pests - Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Lepidoptera	
Pyralidae	
Conogethes punctiferalis	yellow peach moth

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Cerambycidae	
Dihammus vastator	fig longhorn
Chrysomelidae	
Altica gravida	metallic flea beetle
Monolepta australis	red-shouldered leaf beetle
Monolepta divisa	small monolepta beetle
Curculionidae	
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Nitidulidae	
Carpophilus maculatus	dried fruit beetle
Scarabaeidae	
Dilochrosis atripennis	flower chafer
Diphucephala sp.	green scarab beetles
Diptera	
Drosophilidae	
Drosophila spp.	vinegar flies
Hemiptera	
Coreidae	
Fabrictilis australis	squash bug
Mictis profana	crusader bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Pentatomidae	
Plautia affinis	green stink bug
Pyrrhocoridae	
Dysdercus sidae	pale cotton stainer
Scutelleridae	
Scutiphora pedicellata	metallic shield bug
Homoptera	
Aleyrodidae	
Aleurocanthus spiniferus	orange spiny whitefly
Margarodidae	
Icerya seychellarum	Seychelles scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Lepidoptera	
Lymantriidae	
Porthesia paradoxa	tussock moth
Noctuidae	
Agrotis munda	brown cutworm
Eudocima fullonia	fruit-piercing moth

Psychidae	
Hyalarcta huebneri	leaf case moth
Sphingidae	
Hippotion celerio	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Epiphyas spp. (except E. postvittana)	Leafrollers
Orthoptera	
Acrididae	
Austracris guttulosa	spur-throated locust
Valanga irregularis	giant grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips froggatti	black plague thrips
Thripidae	
Scirtothrips dorsalis	chilli thrips

Mite

Arachnida	
Acarina	
Tenuipalpidae	
Brevipalpus lewisi	bunch mite
Tetranychidae	
Calepitrimerus vitis	grapeleaf rust mite
Eutetranychus orientalis	pear leaf blister mite

Mollusc

Gastropoda	
Stylommatophora	
Bradybaenidae	
Bradybaena similaris	snail

Fungus

Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Ascochyta chlorospora	
Coniella diplodiella	white rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria vitis	leaf disease
Cladosporium viticola	cladosporium leaf spot

Weed

Angiospermae	
Asterales	

Asteraceae	
Baccharis halimifolia [contaminant]	baccharis
Chondrilla juncea [contaminant]	skeleton weed
Sonchus spp. (except *S. arvensis, S. asper, S. oleraceus, S. kirkii*) [contaminant]	sowthistle
Xanthium spp. (except X. *spinosum*) [contaminant]	bur
Geraniales	
Zygophyllaceae	
Tribulus terrestris [contaminant]	caltrop
Poales	
Poaceae	
Cenchrus spp. (except *C. ciliaris*) [contaminant]	grass
Digitaria spp. (except *D. aequiglumis, D. ciliaris, D. ischaemum, D. sanguinalis, D. setigera, D. violascens*) [contaminant]	grass
Echinochloa spp. (except *E. crus-galli, E. crus-pavonis, E. esculenta, E. telmatophila*) [contaminant]	grasses
Eragrostis curvula [contaminant]	African love grass
Pennisetum alopecuroides [contaminant]	Chinese pennisetum
Pennisetum polystachion [contaminant]	mission grass
Phragmites spp. [contaminant]	grass
Sorghum halepense [contaminant]	Johnson grass
Sorghum x almum [contaminant]	Columbus grass
Solanales	
Solanaceae	
Lycium spp. (except *L. barbarum, L. ferocissimum*) [contaminant]	boxthorn
Solanum elaeagnifolium [contaminant]	silverleaf nightshade

Regulated non-quarantine pests

None

Regulated non plant pests

Spider
Arachnida
Araneae
Theridiidae

Latrodectus hasselti	Australian red-back spider

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name

Insect

Insecta	
Coleoptera	
Curculionidae	
Otiorhynchus sulcatus	black vine weevil
Nitidulidae	
Carpophilus dimidiatus	corn sap beetle
Carpophilus hemipterus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aphis spiraecola	spirea aphid
Macrosiphum euphorbiae	potato aphid
Coccidae	
Coccus persicae	grapevine scale
Parasaissetia nigra	nigra scale
Parthenolecanium corni	European fruit scale
Diaspididae	
Aspidiotus nerii	oleander scale
Quadraspidiotus perniciosus	San Jose scale
Phylloxeridae	
Viteus vitifoliae	grape phylloxera
Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus calceolariae	citrophilus mealybug
Pseudococcus longispinus	longtailed mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Agaristidae	
Phalaenoides glycinae	grapevine moth
Noctuidae	
Spodoptera litura	cluster caterpillar
Tortricidae	
Cydia molesta	oriental fruit moth
Epiphyas postvittana	light brown apple moth
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Thrips imaginis	plague thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tenuipalpidae	
Brevipalpus californicus	bunch mite
Tetranychidae	
Panonychus ulmi	European red mite
Tetranychus urticae	two-spotted spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Fungus	
Ascomycota	
Diatrypales	
Diatrypaceae	
Eutypa armeniacae	eutypa dieback
Eutypa lata	eutypa dieback
Dothideales	
Botryosphaeriaceae	
Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)	canker
Elsinoaceae	
Elsinoe ampelina (anamorph *Sphaceloma ampelinum*)	anthracnose
Mycosphaerellaceae	
Mycosphaerella personata (anamorph *Pseudocercospora vitis*)	isariopsis blight
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Erysiphales	
Erysiphaceae	
Uncinula necator (anamorph *Oidium tuckeri*)	powdery mildew
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	

Fusicoccum luteum	bunch rot
Macrophomina phaseolina	ashy stem blight
Phoma pomorum	phoma fruit and leaf spot
Phomopsis viticola	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
Greeneria uvicola	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Aspergillus niger	aspergillus rot
Oomycota	
Peronosporales	
Peronosporaceae	
Plasmopara viticola	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus arrhizus	wet rot
Rhizopus stolonifer	rhizopus soft rot

Weed

Angiospermae	
Asterales	
Asteraceae	
Sonchus arvensis [contaminant]	perennial sow thistle
Sonchus asper [contaminant]	prickly sow thistle
Sonchus kirkii [contaminant]	
Sonchus oleraceus [contaminant]	puha
Xanthium spinosum [contaminant]	bur
Poales	
Poaceae	
Cenchrus ciliaris [contaminant]	buffel grass
Digitaria aequiglumis [contaminant]	
Digitaria ciliaris [contaminant]	summer grass
Digitaria ischaemum [contaminant]	summer grass
Digitaria sanguinalis [contaminant]	crab grass
Digitaria setigera [contaminant]	
Digitaria violascens [contaminant]	
Echinochloa crus-galli [contaminant]	barn grass
Echinochloa crus-pavonis [contaminant]	gulf barnyard grass
Echinochloa esculenta [contaminant]	Japanese millet
Echinochloa telmatophila [contaminant]	
Pennisetum macrourum [contaminant]	African feather grass
Solanales	
Solanaceae	
Lycium barbarum [contaminant]	boxthorn
Lycium ferocissimum [contaminant]	boxthorn

Non-regulated non plant pests

None

LYCHEE

Litchi chinensis

Lychees can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by Department of Agriculture/MPI.

Regulated Pest List Commodity Sub-class: Fresh Fruit/Vegetables *Litchi chinensis* from Australia

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Amblypelta lutescens	banana spotting scale
Amblypelta nitida	fruit spotting scale
Bactrocera jarvisi	Jarvis's fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceroplastes rubens	pink/red wax scale
Cryptophlebia ombrodelta	Seychelles scale
Ischnaspis longirostris	black thread scale
Nysius vinitor	Rutherglen bug
Bipolaris hawaiiensis	fungi
Pestalotiopsis sp.	fungi

MANGO
Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand export program for this commodity.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated quarantine pests (actionable)

Pest Scientific Name	Common Name
Bactrocera aquilonis	Northern Territoty fruit fly
Bactrocera cucumis	cucumber fruit Fly
Bactrocera frauenfeldi	fruit fly
Bactrocera jarvisi	Jarvis's fruit fly
Bactrocera kraussi	fruit fly
Bactrocera murrayi	fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera opiliae	false Oriental Fruit Fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly
Dirioxa pornia	Island fruit fly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus dictyospermi	dictyospermum scale
Conogethes punctiferalis	yellow peach moth
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Frankliniella schultzei	flower thrips
Heliothrips haemorrhoidalis	greenhouse thrips
Helopeltis clavifer	
Icerya aegyptiaca	Egyptian fluted scale
Idioscopus clypealis	mango hopper
Idioscopus nitidulus	mango hopper
Ischnaspis longirostris	black thread scale
Isotenes miserana	orange fruitborer
Lobesia sp.	European grape berry moth
Monolepta australis	red-shouldered leaf beetle

Monolepta divisa	small monolepta beetle
Nipaecoccus vastator	karoo thorn mealybug
Ophiusa tirhaca	
Penicillaria jocosatrix	mango tipborer
Phenacaspis dilatata	mango scale
Planococcus citri	Citrus mealybug
Pseudaulacaspis cockerelli	Cockerell's scale
Rastrococcus sp.	
Rhyparida limbatipennis	
Saissetia miranda	Mexican black scale
Selenothrips rubrocinctus	redbanded thrips
Sternochetus mangiferae	mango seed weevil
Asterina punctiformis	
Chaetothyrina tenuissima	stem sooty blotch
Cytosphaera mangiferae	stem-end rot
Elsinoe mangiferae (anamorph *Sphaceloma mangiferae*)	mango scab
Fusicoccum mangiferae	
Nattrassia mangiferae	stem-end rot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangifolia	storage rot
Pestalotiopsis theae	mango blight
Pestalotiopsis virgatula	mango leaf spot
Phomopsis mangiferae	stem end rot
Pythium mangifera (anamorph *Oidium mangiferae*)	mango powdery mildew
Schizoparme straminea (anamorph *Coniella*	schizoparme fruit rot

Non-regulated pests (non actionable)

Pest Scientific Name	Common Name
Aonidiella aurantii	California red scale
Ceroplastes destructor	white wax scale
Epiphyas postvittana	light brown apple moth
Helicoverpa armigera	tomato fruitworm
Heliothrips haemorrhoidalis	greenhouse thrips
Hemiberlesia lataniae	latania scale
Hemiberlesia rapax	greedy scale
Icerya purchasi	cottony cushion scale
Parasaissetia nigra	nigra scale
Pseudococcus longispinus	long tailed mealybug
Saissetia coffeae	helmet scale
Toxoptera aurantii	black citrus aphid
Toxoptera citricida	brown citrus aphid
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	two-spotted spider mite
Alternaria alternata	black stalk rot

Botryosphaeria dothidea (anamorph Fusicoccum aesculi)	canker
Botryosphaeria parva (anamorph Fusicoccum parvum)	canker
Botryosphaeria rhodina	gummosis
Botryosphaeria ribis (anamorph Lasiodiplodia theobromae)	canker
Botryotinia fuckeliana (anamorph Botrytis cinerea)	grey mould
Cladosporium cladosporioides	cladosporium leaf spot
Cochliobolus hawaiiensis	leaf spot, seed rot
Colletotrichum acutatum	anthracnose
Colletotrichum coccodes	anthracnose
Dipodascus Geotrichum (anamorph Geotrichum candidum)	sour rot
Dothiorella aromatica	stem-end rot
Epicoccum purpurascens	black mould
Erysiphe cichoracearum (anamorph Oidium asterispunicei)	powdery mildew
Fusicoccum luteum	bunch rot
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	anthracnose
Glomerella lagenaria (anamorph Colletotrichum orbiculare)	
Pestalotiopsis funereal	leaf spot
Pestalotiopsis versicolor	pestalotiopsis rot
Phytophthora nicotianae	buckeye rot
Pithomyces chartarum	facial eczema fungus
Pleospora allii (anamorph Stemphylium vesicarium)	black mould
Rhizopus stolonifer	rhizopus soft rot
Thanatephorus cucumeris (anamorph Rhizoctonia solani)	rhizoctonia rot

MELON

Cucumis melo

Rockmelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Honeydew melons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 4 (dimethoate treatment) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk Group 2 pests have been listed for melons. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Cucumis melo* fruit as a hitch-hiker, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge the animal and cause it to seek another place to rest.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci,* and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Cucumis melo* fruit, the pre-export dimethoate dip treatment (appendix 4 to the NZ BQA) would disrupt/dislodge and possibly kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi,* and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendix 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 2 and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Honeydew melons exported to New Zealand under appendices 4 and 11 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp. Similarly, rockmelons exported to New Zealand under appendix 11 are required to undergo an in-field spray program.
2. Melons exported to New Zealand under appendix 4 to the NZ BQA are required to undergo a pre-export dimethoate dip treatment. This treatment is effective against *Tetranychus* spp.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai,* and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for this commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Pest Scientific Name	Common Name
Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments	
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly
Ceratitis capitata	Mediterranean fruit fly
Quarantine: Risk group 2 pests (actionable) - Management Control Systems	
Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	melon thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta	
Coleoptera	
Cerambycidae	
Apomecyna histrio	cucurbit stemborer
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28 Spotted ladybird
Henosepilachna suffusa	
Curculionidae	
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Phoridae	
Megaselia sp.	
Tephritidae	
Dacus axanus	fruit fly
Dacus petioliforma	fruit fly
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutes	green mirid
Halticus tibialis	plant bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Aphididae	
Myzus persicae [vect.]	green peach aphid
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	

Helicoverpa assulta	cape gooseberry budworm
Proxenus tenuis	
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Spoladea recurvalis	Hawaiian beet webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Tetranychidae	
Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Ascomycota	
Unknown Ascomycota	
Hyponectriaceae	
Monographella cucumerina (anamorph *Microdochium tabacinum*)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis cucurbitae	
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora citrullina	cigar-end
Ulocladium sp.	
Tuberculariales	
Tuberculariaceae	
Fusarium chlamydosporum	root and stem rot
Fusarium concolor	
Fusarium oxysporum f. sp. *melonis*	
Oomycota	
Pythiales	
Pythiaceae	
Pythium aphanidermatum	cottony leak
Zygomycota: Zygomycetes	
Mucorales	
Choanephoraceae	
Choanephora cucurbitarum	blight

Bacterium

Pseudomonadaceae	
Acidovorax avenae subsp. *Citrulli*	bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

None

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Naupactus leucoloma	white fringed weevil
Listroderes difficilis	vegetable weevil
Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Toxoptera citricidus	brown citrus aphid

Pseudococcidae	
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Petrobia lateens	brown wheat mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum)*	black leaf spot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Gibberella avenacea (anamorph *Fusarium avenaceum*)	fusarium stem canker
Gibberella baccata (anamorph *Fusarium lateritium*)	fusarium rot

Gibberella intricans	
(anamorph *Fusarium equiseti*)	root and stem dry rot
Nectria haematococca	
(anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana	
(anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella lagenaria	
(anamorph *Colletotrichum orbiculare*)	
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum	
(anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris	
(anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii	
(anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Septoria cucurbitacearum	
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria alternata	black stalk rot
Alternaria cucumerina	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Ulocladium cucurbitae	
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium moniliforme var. intermedium	mould
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium solani f. sp. *cucurbitae*	
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	

Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot

Bacterium

Pseudomonadaceae	
Pseudomonas syringae	bacterial blast
Pseudomonas syringae pv. lachrymans	angular leaf spot
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Virus

tobacco ringspot nepovirus [TRSV]

Non-regulated non plant pests

None

PAPAYA

Carica papaya

Papaya can be exported to New Zealand under Appendix No. 12 - Irradiation of the NZ BQA.

Growers and packhouse choosing 289 Gray (Gy) irradiation for papaya do not need to be specifically registered for the New Zealand export program.

Growers and packhouse choosing 150 Gy irradiation and in-field controls for papaya need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

***Conogethes punctiferalis* (yellow peach moth) is listed for papaya, and the Department of Agriculture can certify freedom from this pest based on the following:**

Conogethes punctiferalis

1. If infield controls for *Conogethes punctiferalis* are carried out, fruit will be irradiated at 150 Gy prior to export.

2. Where irradiation is chosen as the pest control activity for *Conogethes punctiferalis* a minimum dose of 289 Gy must be applied prior to export. This treatment will be considered to be a generic treatment for all regulated arthropod pests on the Australian papaya pest list, listed below.

Regulated quarantine pests (actionable)

Pest Scientific Name	Common Name
Asperisporium caricae	black spot
Phomopsis caricae-papayae	wet fruit rot
Phytopthora capsici	buckeye rot
Phytopthora palmivora	black rot
Bactrocera cucumis	**cucumber fruit fly #**
Bactrocera frauenfeldi	**fruit fly #**
Bactrocera jarvisi	**Jarvis's fruit fly #**
Bactrocera musae	**banana fruit fly #**
Bactrocera neohumeralis	**lesser Queensland fruit fly #**
Bactrocera tryoni	**Queensland fruit fly #**
Ceratitis capitata	**Mediterranean fruit fly #**
Dirioxa pornia	island fruit fly
Aleurodicus dispersus	spiraling whitefly
Amblypelta lutescens	banana spotting bug
Amblypelta nitida	fruit spotting bug
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Carpophillis maculatus	dried fruit beetle
Chrysomphalus dictyospermi	dictyospermum scale

Conogethes punctiferalis	**yellow peach moth #**
Eucalymnatus tessellatus	tessellated scale
Eudocima aurantia	fruit-piercing moth
Eudocima cocalus	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Eudocima irridescens	fruit-piercing moth
Eudocima jordani	fruit-piercing moth
Eudocima materna	fruit-piercing moth
Eudocima salaminia	fruit-piercing moth
Ferrisia virgata	striped mealybug
Pericyma cruegeri	poinciana looper
Pseudaulacaspis cockerelli	Cockerell's scale
Papaya ringspot virus (type P strain)	PRSV-Type P

Non-regulated pests (non-actionable)

Pest Scientific Name	**Common Name**
Brevipalpus phoenicis	passion vine mite
Polyphagotarsonemus latus	broad mite
Tetranychus urticae	twospotted spider mite
Alternaria alternata	black stalk rot
Botryosphaeria rhodina (anamorph *Lasiodiplodia theobromae*)	gummosis
Botryosphaeria ribis	canker
Colletotrichum acutatum	anthracnose
Colletotrichum capsici	anthracnose
Colletotrichum dematium	anthracnose
Corynespora cassicola	leaf spot
Erysiphe cruciferarum	powdery mildew
Fusarium pallidoroseum	fruit core rot
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	anthracnose
Leveillula taurica	powdery mildew
Mycosphaerella caricae (anamorph Phoma caricae-papayae)	leaf spot
Phytophthora nicotianae	buckeye rot
Rhizopus stolonifer	rhizopus soft rot
Aphis spiraecola	spirae aphid

Denotes high impact pest

PINEAPPLE

Ananas comosus

Pineapple can be exported to New Zealand under the Non-host Treatment Appendix No. 6 of the NZ BQA/IHS, based on non-host status for the variety 'Smooth Cayenne' or approved varieties that are genetically ≥ 50 per cent 'Smooth Cayenne'.

Approved varieties of pineapple covered by this treatment appendix are:

- '**Smooth Cayenne**'
- '**Aus-Jubilee**'
- '**MD-2**' **(also known as '73-114')**
- '**73-50**' **(also known as 'CO-2')**

Growers and packhouse do not need to be specifically registered for the New Zealand export program.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk Group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

None

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Nitidulidae	
Brachypeplus basalis	dried fruit beetle
Carpophilus marginellus	dried fruit beetle
Carpophilus oculatus	dried fruit beetle
Urophorus humeralis	dried fruit beetle
Ptinidae	
Mezium americanum	American spider beetle
Scarabaeidae	

Anoplognathus porosus	Christmas beetle
Antitrogus mussoni	cane grub
Lepidiota sp.	cane grup
Rhopaea spp.	pasture white grubs
Diptera	
Muscidae	
Atherigona orientalis	muscid fly
Homoptera	
Diaspididae	
Diaspis bromeliae	pineapple scale
Pseudococcidae	
Dysmicoccus brevipes	pineapple mealybug
Isoptera	
Rhinotermitidae	
Rhinotermes intermedius	termite
Lepidoptera	
Tineidae	
Opogona glycyphaga	sugarcane bud moth

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus sp.	mould mite
Histiomidae	
Histiostoma sp.	mite
Tarsonemidae	
Tarsonemus ananas	pineapple mite
Tenuipalpidae	
Dolichotetranychus floridanus	pineapple false spider mite

Nematode

Secernentea	
Tylenchida	
Hoplolaimidae	
Rotylenchus reniformis	
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode

Symphylid

Symphyla	
Unknown Symphyla	
Symphylidae	
Hanseniella sp.	symphylan

Fungus

Mitosporic Fungi (Hyphomycetes)

Hyphomycetes
Dematiaceae
Thielaviopsis paradoxa
Moniliaceae
Penicillium funiculosum

Bacterium

Enterobacteriaceae	
Erwinia ananas	marbling of fruit

Virus

mealybug wilt closterovirus

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Insect
Insecta
Hymenoptera
Formicidae

Iridomyrmex glaber	black house ant
Paratrechina vaga	ant
Tapinoma sp.	ant

Non-regulated (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	**Common Name**
Insecta	
Coleoptera	
Cicujidae	
Cryptamorpha desjardinsii	Desjardin’s flat beetle
Nitidulidae	
Carpophilus hemipterus	dried fruit beetle
Homoptera	
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Tineidae	
Opogona omoscopa	detritus moth
Thysanoptera	

Thripidae	
Thrips tabaci	onion thirps

Mite

Arachnida	
Acarina	
Acaridae	
Rhizoglyphus sp.	acarid mite

Nematode

Secernentea	
Tylenchida	
Meloidogynidae	
Meloidogyne javanica	Javanese root knot nematode

Fungus

Ascomycota	
Hypocreales	
Hypocreaceae	
Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)	ear rot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora cinnamomi	
Phytophthora nicotianae var. *parasitica*	wet pod rot, downy mildew
Pythium debaryanum	cottony leak
Pythium spinosum	

Virus

tomato spotted wilt tospovirus (TSWV)

Non-regulated non-plant pests/organisms

Pest Scientific Name	Common Name
Insect	
Insecta	
Hymenoptera	
Formicidae	
Pheidole megacephala	big-head ant
Technomyrmex albipes	white footed ant

PUMPKIN

Cucurbitae pepo (Note*: C. moschata* is not permitted)

Pumpkins (*C. pepo*) can be exported to New Zealand under the following appendicies.

- **Appendix 2 – (fruit fly Area Freedom)**

A number of Risk group 2 pests have been listed for pumpkins (*C. pepo*). The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on pumpkin fruit during Department of Agriculture pre-export inspection.

Tetranychus kanzawai

1. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
2. Historical records show that *T. kanzawai* has never been detected on pumpkin fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

Bemisia tabaci	sweet potato whitefly
Tetranychus kanzawa	kanzawa mite

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Pest Scientific Name	Common Name

Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Aphis gossypii [vect.]	cotton aphid
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Epilachna vigintioctopunctata	28-spot ladybird
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips tabaci [vect.]	onion thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp.	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite

Tomato big bud phytoplasma
Tobacco ringspot nepovirus [strain] [VO]

Non-regulated pests (non-actionable)

Pest Scientific Name	Common Name
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	white-fringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph	cucumber stem rot
Phoma cucurbitacearum)	
*Dipodascus geotrichum (*anamorph	sour rot
Geotrichum candidum)	
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot
*Erysiphe cichoracearum (*anamorph	powdery mildew
Oidium asteris-punicei)	
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	
*Gibberella acuminata (*anamorph	fusarium storage rot
Fusarium acuminatum)	
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker

*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

STRAWBERRY

Fragaria spp.

Strawberries can be exported to New Zealand under appendices 2 (fruit fly area freedom) and 3 (methyl bromide fumigation) to the NZ BQA/IHS.

Growers and packhouse do not need to be specifically registered for the New Zealand program unless they are undertaking methyl bromide fumigations on their premises.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated Pests (actionable)

Quarantine: Risk Group 3 pests (actionable) – Mandatory Treatments

Pest Scientific Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) – Management Control Systems

None

Quarantine: Risk group 1 pests (actionable) – Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cantharidae	
Chauliognathus lugubris	soldier beetle
Chrysomelidae	
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Curculionidae	
Orthorhinus aethops	weevil
Otiorhynchus cribricollis	cribrate weevil
Rhadinosomus lacordairei	thin strawberry weevil

Rhinaria perdix	strawberry weevil
Scarabaeidae	
Lepidiota frenchi	French's cane grub
Metanastes vulgivagus	black beetle
Repsimus aeneus	white grub
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Hemiptera	
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Pseudococcidae	
Chorizococcus arecae	mealy bug
Dysmicoccus brevipes	pineapple mealybug
Lepidoptera	
Noctuidae	
Helicoverpa punctigera	oriental tobacco budworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Tortricidae	
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers
Isotenes miserana	orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

Non-regulated Pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Curculionidae	
Asynonychus cervinus	Fuller's rose weevil
Desiantha diversipes	spotted vegetable weevil
Graphognathus leucoloma	whitefringed weevil

Listroderes difficilis	vegetable weevil
Otiorhynchus rugosostriatus	rough strawberry weevil
Otiorhynchus sulcatus	black vine weevil
Phlyctinus callosus	banded fruit weevil
Scarabaeidae	
Heteronychus arator	black beetle
Homoptera	
Aleyrodidae	
Trialeurodes vaporariorum	greenhouse whitefly
Coccidae	
Coccus hesperidum	brown soft scale
Pseudococcidae	
Planococcus citri	citrus mealybug
Lepidoptera	
Noctuidae	
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket
Thysanopter	
Thripidae	
Thrips imaginis	plague thrips

Mite

Arachnida	
Acarina	
Eriophyidae	
Phytonemus pallidus	banana mite
Tetranychidae	
Bryobia rubrioculus	bryobia mite
Tetranychus lambi	strawberry spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite

Myriapod

Diplopode	
Julida	
Blaniulidae	
Blaniulua guttulatus	spotted snake millipede

Mollusc

Gastropoda	
Stylommatophora	
Helicidae	
Helix aspersa	common garden snail
Limacidae	
Deroceras panormitanum	brown field slug

Deroceras reticulatum	grey garden slug
Milax gagates	black-keeled slug

Non-regulated non plant pests/organisms

None

TOMATO

Lycopersicon esculentum

Tomatoes can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom) to the NZ BQA/IHS**
- **Appendix 12 (irradiation) to the NZ BQA/IHS**

A number of Risk group 2 pests have been listed for tomatoes. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on tomato fruit during Department of Agriculture pre-export inspection.

Thrips palmi

1. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand, or treated with methyl bromide.
2. Historical records show that *T. palmi* has never been detected on tomato fruit during Department of Agriculture pre-export inspection.

Bactrocera musae

1. Non-preferred host status of tomatoes. It is suggested that the recorded association of these pests with this commodity is an error.
2. Normal spray programs using fenthion or dimethoate against fruit fly (both registered for this purpose) will control *B. musae* should it occur.
3. Pre-export inspection of fruit will identify the presence of both *B. musae*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. musae* has never been detected on tomato fruit during Department of Agriculture pre-export inspection.
5. Irradiation at 150 Gy is deemed effective against all fruit flies.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated Pests (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Pest Scientific Name **Common Name**

Insect

Insecta
Diptera
Tephritidae

Bactrocera cucumis	cucumber fruit fly
Bactrocera neohumeralis	lesser Queensland fruit fly
Bactrocera tryoni	Queensland fruit fly
Ceratitis capitata	Mediterranean fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect

Insecta
Diptera
Tephritidae

Bactrocera musae	banana fruit fly

Homoptera
Aleyrodidae

Bemisia tabaci [vect.]	sweet potato whitefly

Thysanoptera
Thripidae

Thrips palmi [vect.]	melon thrips

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect

Insecta

Tenebrionidae

Gonocephalum carpentariae	false wireworm

Diptera
Lonchaeidae

Lamprolonchaea brouniana	metallic-green tomato fly

Muscidae

Atherigona orientalis	muscid fly

Tephritidae

Dirioxa pornia	island fruit fly

Hemiptera
Aleyrodidae

Trialeurodes vaporariorum [vect.]	greenhouse whitefly

Cicadellidae

Orosius argentatus [vect.]	common brown leafhopper
Orosius orientalis [vect.]	common brown leafhopper

Coreidae

Fabrictilis australis	squash bug

Lygaeidae

Nysius vinitor	Rutherglen bug

Pentatomidae

Plautia affinis	green stink bug

Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Rhopalidae	
Leptocoris mitellatus	leptocoris bug
Homoptera	
Aphididae	
Myzus persicae [vect.]	green peach aphid
Cicadellidae	
Austroasca viridigrisea	vegetable leafhopper
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Spodoptera exigua	beet armyworm
Thysanoptera	
Thripidae	
Frankliniella schultzei [vect.]	tomato thrips
Scirtothrips dorsalis [vect.]	chilli thrips

Fungus

Oomycota

Pythiales

Pythiaceae

Pythium aphanidermatum	cottony leak

Virus

capsicum chlorosis virus (CaCV)
potato spindle tuber viroid (PSTVd)
tomato torrado virus (ToTV)
tomato yellow leafcurl virus (TYLCV)

Phytoplasma

tomato big bud phytoplasma (TBB)

Regulated non-quarantine pests

None

Regulated non plant pests

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name
Insect	
Insecta	
Coleoptera	
Coccinellidae	
Epilachna vigintioctopunctata	28-spot ladybird
Curculionidae	
Naupactus leucoloma	whitefringed weevil
Listroderes difficilis	vegetable weevil
Scarabaeidae	
Heteronychus arator	black beetle
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Macrosiphum euphorbiae	potato aphid
Pseudococcidae	
Pseudococcus viburni	obscure mealybug
Lepidoptera	
Noctuidae	
Agrotis ipsilon	greasy cutworm
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips

Thrips tabaci	onion thrips
Gelechiidae	
Phthorimaea operculella	potato tuber moth
Orthoptera	
Gryllidae	
Teleogryllus commodus	black field cricket

Mite

Arachnida	
Acarina	
Eriophyidae	
Aculus lycopersici	tomato russet mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite

Fungus

Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)	black leaf spot
Hypocreales	
Hypocreaceae	
Gibberella acuminata (anamorph *Fusarium acuminatum*)	fusarium storage rot
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Saccharomycetales	
Dipodascaceae	
Dipodascus geotrichum (anamorph *Geotrichum candidum*)	sour rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	

Sphaeropsidales	
Sphaerioidaceae	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria tenuissima	alternaria mould
Cladosporium oxysporum	cladosporium leaf spot
Moniliaceae	
Verticillium dahliae	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus stolonifer	rhizopus soft rot

Virus

Tobacco ringspot nepovirus (TRSV)
Tomato spotted wilt virus (TSWV)

Non-regulated non plant pests

None

WATERMELON

Citrullus lanatus

Watermelons can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 3 (methyl bromide fumigation) and Appendix 10 (field control programme)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme)**

A number of Risk group 2 pests have been listed for watermelons. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B.tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arose where *B. tabaci* was found to be damaging crops, application of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. If by chance *B. tabaci* were present on harvested *Citrullus lanatus* fruit as a hitch-hiker, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
4. Pre-export inspection of fruit will identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
5. Historical records show that *B. tabaci* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

Note: item 3 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) or 11 (winter window) to the NZ BQA. It is felt however, that items 1, 2, 4, and 5 provide an appropriate level of confidence in certifying freedom from this pest.

Thrips palmi

1. If *T. palmi* were present on harvested *Citrullus lanatus* fruit, the pre-export methyl bromide fumigation treatment (appendix 3 to the NZ BQA) would kill the animal.
2. Pre-export inspection of fruit will identify the presence of *T. palmi*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. palmi* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

Note: item 1 above does not apply to melon fruit exported to New Zealand under appendices 2 (fruit fly area freedom) and 11 (winter window) to the NZ BQA. It is felt however, that items 2, and 3 provide an appropriate level of confidence in certifying freedom from this pest.

Tetranychus kanzawai

1. Dimethoate is registered for in-field use against *Tetranychus* spp. Melons exported to New Zealand under appendices 3 and 10 to the NZ BQA are required to undergo an in-field spray program (using dimethoate) for the control of fruit fly. This program is also effective against *Tetranychus* spp.
2. Melons exported to New Zealand under appendix 3 to the NZ BQA are required to undergo a pre-export methyl bromide fumigation treatment. This treatment will kill *T. kanzawai*.
3. Pre-export inspection of fruit will identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *T. kanzawai* has never been detected on melon fruit during Department of Agriculture pre-export inspection.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated pests (actionable)

Quarantine: Risk group 3 pests (actionable) - Mandatory Treatments

Scientific Pest Name	Common Name
Insect	
Insecta	
Diptera	
Tephritidae	
Bactrocera cucumis	cucumber fruit fly

Quarantine: Risk group 2 pests (actionable) - Management Control Systems

Insect	
Insecta	
Homoptera	
Aleyrodidae	
Bemisia tabaci	sweet potato whitefly
Thysanoptera	
Thripidae	
Thrips palmi	melon thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Tetranychus kanzawai	kanzawa mite

Quarantine: Risk group 1 pests (actionable) - Nil permitted in ≤ 600 unit sample. Treatments (where applicable) allowed as corrective action.

Insect	
Insecta	
Coleoptera	
Cerambycidae	
Apomecyna spp.	vine borers
Chrysomelidae	
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Chaetocnema spp.	flea beetles
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	

Epilachna boisduvali	epilachna beetle
Epilachna cucurbitae	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Henosepilachna suffusa	
Hemiptera	
Coreidae	
Amblypelta nitida	fruit-spotting bug
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Dinidoridae	
Megymenum insulare	cucurbit shield bug
Lygaeidae	
Nysius vinitor	Rutherglen bug
Miridae	
Creontiades dilutus	green mirid
Halticiellus tibialis	plant bug
Pentatomidae	
Kapunda troughtoni	variable shield bug
Homoptera	
Aleyrodidae	
Trialeurodes spp. (except *T. vaporariorum*)	whiteflies
Cicadellidae	
Empoasca spp.	green leafhoppers
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Pseudococcidae	
Ferrisia virgata	striped mealybug
Planococcus minor	Pacific mealybug
Lepidoptera	
Noctuidae	
Agrotis spp. (except *A. ipsilon*)	cutworms
Anadevidia peponis	cucumber looper
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Heliothis spp.	noctuids
Spodoptera exigua	beet armyworm
Pyralidae	
Diaphania indica	melon moth
Hellula undalis	oriental cabbage webworm
Thysanoptera	
Thripidae	
Thrips hawaiiensis	Hawaiian flower thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus dimidiatus	mushroom mite
Tetranychidae	

Eutetranychus orientalis	pear leaf blister mite
Tetranychus desertorum	desert spider mite
Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite

Fungus

Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Ascochyta spp.
Phomopsis cucurbitae
Oomycota
Pythiales
Pythiaceae

Pythium spp.	pythium rot

Bacterium

Enterobacteriaceae

Erwinia tracheiphila	bacterial wilt

Pseudomonadaceae

Acidovorax avenae subsp. citrulli	bacterial rot

Regulated non-quarantine pests

None

Regulated non plant pests

Insect

Insecta
Hymenoptera
Formicidae

Solenopsis geminata	fire ant

Non-regulated pests (non-actionable)

Non-regulated non-quarantine pests

Pest Scientific Name	Common Name

Insect

Insecta
Coleoptera
Curculionidae

Asynonychus cervinus	Fuller's rose weevil
Listroderes obliquus	vegetable weevil
Naupactus leucoloma	whitefringed weevil

Collembola	
Sminthuridae	
Bourletiella hortensis	garden springtail
Sminthurus viridis	lucerne flea
Dermaptera	
Forficulidae	
Forficula auricularia	European earwig
Diptera	
Anthomyiidae	
Delia platura	seedcorn maggot
Hemiptera	
Pentatomidae	
Nezara viridula	green vegetable bug
Homoptera	
Aleyrodidae	
Bemisia argentifolii	poinsettia whitefly
Trialeurodes vaporariorum	greenhouse whitefly
Aphididae	
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aulacorthum solani	foxglove aphid
Lipaphis erysimi	turnip aphid
Macrosiphum euphorbiae	potato aphid
Myzus persicae	green peach aphid
Rhopalosiphum maidis	corn leaf aphid
Rhopalosiphum rufiabdominalis	rice root aphid
Toxoptera aurantii	black citrus aphid
Lepidoptera	
Noctuidae	
Chrysodeixis eriosoma	green garden looper
Helicoverpa armigera	tomato fruitworm
Spodoptera litura	cluster caterpillar
Thysanoptera	
Thripidae	
Frankliniella occidentalis	western flower thrips
Thrips tabaci	onion thrips

Mite

Arachnida	
Acarina	
Acaridae	
Tyrophagus putrescentiae	mould mite
Eupodidae	
Halotydeus destructor	oriental mite
Penthaleus major	winter grain mite
Tarsonemidae	
Polyphagotarsonemus latus	broad mite
Tetranychidae	
Panonychus citri	citrus red mite
Tetranychus cinnabarinus	carmine spider mite

Tetranychus ludeni	bean spider mite
Tetranychus urticae	twospotted spider mite

Fungus

Ascomycota	
Dothideales	
Pleosporaceae	
Leptosphaerulina trifolii	seed rot
Unknown Dothideales	
Didymella bryoniae (anamorph *Phoma cucurbitacearum*)	cucumber stem rot
Erysiphales	
Erysiphaceae	
Erysiphe cichoracearum (anamorph *Oidium asteris-punicei*)	powdery mildew
Hypocreales	
Hypocreaceae	
Nectria haematococca (anamorph *Fusarium solani*)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
Botryotinia fuckeliana (anamorph *Botrytis cinerea*)	grey mould
Sclerotinia sclerotiorum	cottony rot
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)	bitter rot
Glomerella lagenaria (anamorph *Colletotrichum orbiculare*)	
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)	rhizoctonia rot
Stereales	
Atheliaceae	
Athelia rolfsii (anamorph *Sclerotium rolfsii*)	Rolf's disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phoma exigua	phoma rot
Septoria cucurbitacearum	
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria cucumerina	
Moniliaceae	
Verticillium dahliae	verticillium wilt

Tuberculariales	
Tuberculariaceae	
Fusarium culmorum	dry rot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium solani f. sp. *cucurbitae*	
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Trichothecium roseum	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
Pseudoperonospora cubensis	downy mildew

Bacterium

Pseudomonadaceae	
Xanthomonas campestris pv. *cucurbitae*	bacterial leaf spot

Non-regulated non plant pests

None

ZUCCHINI & SCALLOPINI

Cucurbita pepo

Zucchinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

Scallopinis can be exported to New Zealand under the following appendices:

- **Appendix 2 (fruit fly area freedom)**
- **Appendix 11 (winter window) and Appendix 10 (field control programme).**

A number of Risk group 2 pests have been listed for zucchinis and scallopinis. The Department of Agriculture can certify freedom from these pests based on the following:

Bemisia tabaci

1. The lifecycle of *B. tabaci* is carried out on the underside of host plant leaves, and there is no association of this pest with the fruit.
2. If a situation arouse where *B. tabaci* was found to be damaging crops, applications of chemicals (registered for use against *B. tabaci*) such as D-C Tron would provide the necessary control of this pest.
3. Pre-export inspection of fruit would identify the presence of *B. tabaci*, and the fruit would be rejected for export to New Zealand.
4. Historical records show that *B. tabaci* has never been detected on zucchini fruit during Department of Agriculture pre-export inspection.

Tetranychus kanzawai

1. Monitoring, and where applicable, application of chemicals (registered for use against *Tetranychus* spp.) would provide the necessary control of this pest.
2. Pre-export inspection of fruit would identify the presence of *T. kanzawai*, and the fruit would be rejected for export to New Zealand.
3. Historical records show that *T. kanzawai* has never been detected on zuvvhini fruit during Department of Agriculture pre-export inspection.

Thrips palmi* (zucchini only*)

1. Monitoring, and where applicable, application of chemicals (registered for use against *Thrips palmi*) would provide the necessary control of this pest.
2. Pre-export inspection of fruit would identify the presence of *Thrips palmi*, and the fruit would be rejected for export to New Zealand, or treated with methyl bromide.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

Regulated Quarantine Pests (actionable)

Pest Scientific Name	Common Name
Amblypelta nitida	fruit-spotting bug
Anadevidia peponis	cucumber looper
Apomecyna spp	vine borers
Aulacaspis tubercularis	common mango scale
Aulacophora foveicollis	red pumpkin beetle
Aulacophora hilaris	pumpkin beetle
Bactrocera cucumis	cucumber fruit fly #
Bemisia tabaci	sweet potato whitefly #
Ceratitis capitata	Mediterranean fruit fly #
Chrysomphalus aonidum	Florida red scale
Creontiades dilutus	green mirid
Diaphania indica	melon moth
Dysmicoccus brevipes	pineapple mealybug
Empoasca spp	green leafhoppers
Epilachna boisduvali	epilachna beetle
Epilachna vigintioctomaculata	leaf feeding coccinellid
Fabrictilis australis	squash bug
Fabrictilis gonagra	passionvine bug
Ferrisia virgata	striped mealybug
Graphognathus peregrinus	weevil
Halticiellus tibialis	plant bug
Helicoverpa assulta	cape gooseberry budworm
Hellula undalis	Oriental cabbage webworm
Henosepilachna cucurbitae	cucurbit ladybird
Henosepilachna suffusa	
Megymenum insulare	cucurbit shield bug
Monolepta australis	red-shouldered leaf beetle
Myzus persicae [vect.]	green peach aphid
Nysius vinitor	Rutherglen bug
Planococcus minor	Pacific mealybug
Promecotheca bryanti	
Pseudaulacaspis pentagona	white peach scale
Solenopsis geminate	fire ant
Thrips hawaiiensis	Hawaiian flower thrips
Thrips palmi	melon thrips
Tiracola plagiata	banana fruit caterpillar
Choanephora cucurbitarum	blight
Fusarium oxysporum f. sp. *Melonis*	
Pythium aphanidermatum	cotton leak
Pythium mamillatum	root rot
Pythium myriotylum	rhizome and root rot
Bryobia spp	bryobiaid mites
Eutetranychus orientalis	pear leaf blister mite
Tetrabychus desertorum	desert spider mite
Tetranychus kanzawai	**kanzawa mite #**

Tetranychus lombardinii	southern lobed mite
Tetranychus neocaledonicus	Mexican spider mite
Tyrophagus dimidiatus	mushroom mite

Tomato big bud phytoplasma

Non-regulated pests (non-actionable)

Pest Scientific Name	Common Name
Acyrthosiphon kondoi	bluegreen lucerne aphid
Acyrthosiphon pisum	pea aphid
Aphis craccivora	cowpea aphid
Aphis gossypii	cotton aphid
Aspidiotus nerii	oleander scale
Asynonychus cervinus	Fuller's rose weevil
Aulacorthum solani	foxglove aphid
Bourletiella hortensis	garden springtail
Chrysodeixis eriosoma	green garden looper
Delia platura	seedcorn maggot
Epilachna vigintioctopunctata	28-spot ladybird
Forficula auricularia	European earwig
Frankliniella occidentalis	western flower thrips
Helicoverpa armigera	tomato fruit worm
Heliothrips haemorrhoidalis	greenhouse thrips
Inopus rubriceps	Australian soldier fly
Lipaphis erysimi	turnip aphid
Listroderes obliquus	vegetable weevil
Macrosiphum euphorbiae	potato aphid
Nauoactus leucoloma	whitefringed weevil
Nezara viridula	green vegetable bug
Parthenothrips dracaenae	palm thrips
Planococcus citri	citrus mealybug
Pseudococcus viburni	obscure mealybug
Rhopalosiphum rufiabdominalis	rice root aphid
Scolypopa australis	passionvine hopper
Sminthurus viridis	lucerne flea
Spodoptera litura	cluster caterpillar
Trialeurodes vaporariorum	greenhouse whitefly
Thrips tabaci	onion thrips
Alternaria cucumerina	
*Athelia rolfsii (*anamorph *Sclerotium rolfsii)*	Rolf's disease
*Botryotinia fuckeliana (*anamorph *Botrytis cinerea)*	grey mould
*Ceratocystis paradoxa (*anamorph *Chalara paradoxa)*	ceratocystis rot
Colletotrichum coccodes	anthracnose
*Didymella bryoniae (*anamorph *Phoma cucurbitacearum)*	cucumber stem rot
*Dipodascus geotrichum (*anamorph *Geotrichum candidum)*	sour rot
Epicoccum nigrum	black mould
Erwinia carotovora subsp. *carotovora*	bacterial soft rot

*Erysiphe cichoracearum (*anamorph *Oidium asteris-punicei)*	powdery mildew
Fusarium culmorum	dry rot
Fusarium oxysporum	leaf spot
Fusarium oxysporum f. sp. *niveum*	
Fusarium pallidoroseum	fusarium rot
Fusarium poae	fusarium rot
Fusarium solani f. sp. *Cucrbitae*	
*Gibberella acuminata (*anamorph *Fusarium acuminatum)*	fusarium storage rot
*Gibberella avenacea (*anamorph *Fusarium avenaceum)*	fusarium stem canker
*Gibberella fujikuroi (*anamorph *Fusarium fujikuroi)*	fusarium rot
*Gibberella gordonia (*anamorph *Fusarium heterosporum)*	mould
*Gibberella intricans (*anamorph *Fusarium equiseti)*	root and stem dry rot
*Gibberella zeae (*anamorph *Fusarium graminearum)*	mould
*Glomerella lagenaria (*anamorph *Colletotrichum orbiculare)*	
Lasiodiplodia theobromae	fruit and stem-end rot
Macrophomina phaseolina	ashy stem blight
Phytophthora cryptogea	pink rot
Phytophthora drechsleri	
Pseudomonas syringae pv. *lachrymans*	angular leaf spot
Pseudoperonospora cubensis	downy mildew
Pythium irregulare	pythium root and stem rot
Pythium oligandrum	
Pythium ultimum	leak
Ralstonia solanacearum	bacterial wilt
Rhizopus arrhizus	wet rot
Sclerotinia minor	sclerotinia rot
Sclerotinia sclerotiorum	cottony rot
Septoria cucurbitacearum	
*Thanatephorus cucumeris (*anamorph *Rhizoctonia solani)*	rhizoctonia rot
Trichothecium roseum	pink rot
Verticillium dahliae	verticillium wilt
Xanthomonas campestris pv. cucurbitae	bacterial leaf spot

Halotydeus destructor	Oriental mite
Panonychus citri	citrus red mite
Penthaleus major	winter grain mite
Polyphagotarsonemus latus	broad mite
Tetranychus cinnabarinus	carmine spider mite
Tetranychus ludeni	bean spider mite
Tetranychus urticae	two-spotted spider mite
Tyrophagus putrescentiae	mould mite

Tobacco ringspot nepovirus (TRSV)

 # Denotes high impact pest

ATTACHMENT 2 FORMS

2.1 APPLICATION FOR GROWER REGISTRATION

APPLICATION FOR GROWER REGISTRATION AUSTRALIA - NEW ZEALAND **Please post or fax this form to your local regional Department of Agriculture office**			
NAME OF GROWER/S			
GROWER NUMBER (if previously registered)			
EMAIL ADDRESS			
POSTAL OR BUSINESS ADDRESS			
	POST CODE		
PROPERTY ADDRESS			
	POST CODE		
REAL PROPERTY DESCRIPTION (of area under planting – please attach detailed maps)			

DECLARATION

I/We, ... hereby apply for registration to produce .....(insert one crop group only) for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry for Primary Industries, New Zealand and the Australian Government Department of Agriculture.

I have read the Systems Operation Manual and agree to be bound by the conditions and restrictions contained therein as they apply to growers.

I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

CROP GROUPS

Avocados	Zucchini	Grapes	Capsicums
Citrus	Tomato	Bananas	Papaya
Scallopini	Watermelon	Pears	
Pumpkin	Strawberries	Rockmelon	Honeydew melon
Cucumber	Scaloppini		

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.2 APPLICATION FOR REGISTRATION OF: PACKHOUSE / FREIGHT FORWARDER / LOAD OUT FACILITY / EXPORT INSPECTOR (DELEGATE)

Please post or fax this form to your local regional Department of Agriculture office			
NAME			
DEPARTMENT OF AGRICULTURE EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
		POST CODE	
PREMISES ADDRESS			
		POST CODE	

DECLARATION

I/We, ... hereby apply for registration as a (circle as appropriate) packer / freight forwarder / load out facility / delegated export inspector for (commodities)……..... for export to New Zealand as required under the Bilateral Quarantine Arrangement made between the Ministry for Primary Industries, New Zealand and the Australian Government Department of Agriculture.

The following persons are hereby nominated as those responsible for upholding requirements within the SOM.

Name	**Responsibility** (circle as appropriate)
……	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……..	Product Integrity / Load Out / Export Inspection
……	Product Integrity / Load Out / Export Inspection

I have read the Systems Operation Manual as amended and agree to be bound by the conditions and restrictions contained therein as they apply to packhouses / freight forwarders / load out facilities / delegated export inspectors. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.

SIGNATURE		**DATE**	
WITNESS		**DATE**	

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.3 APPLICATION FOR TREATMENT CENTRE REGISTRATION

APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW **Please post or fax this form to your local regional Department of Agriculture office**			
NAME OF TREATMENT CENTRE			
DEPARTMENT OF AGRICULTURE EXPORT ESTABLISHMENT NUMBER (if applicable)			
EMAIL ADDRESS			
POSTAL ADDRESS			
	POST CODE		
PREMISES ADDRESS			
	POST CODE		
DECLARATION I/We, ... hereby apply for registration as a treatment centre as required under the Bilateral Quarantine Arrangement made between the Ministry for Primary Industries, New Zealand and the Australian Government Department of Agriculture. I have read the Systems Operation Manual and agree to be bound by the conditions and restrictions contained therein as they apply to treatment centres. I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.			
SIGNATURE		**DATE**	
WITNESS		**DATE**	
Treatment Type (please specify)			
Methyl Bromide Fumigation Cold Storage	Dimethoate Irradiation		

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.4 APPLICATION TO PERFORM FIELD MONITORING ADVISORY SERVICES AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

I/We (Name) ..... for Season/Year .....
Address .....
.....
.....

hereby make application for approval under the NZ BQA to perform field monitoring advisory services to growers registered by the Department of Agriculture for the following commodities:

....
....
....

Please attach list separately if insufficient room above.

Please detail briefly your training and experience that enables you to give grower consultancy for the control of pests, disease and weed seeds.
.....
.....
.....
.....

I/We have copies of the NZ BQA Systems Operation Manual as amended and have the ability to recognise and identify the regulated pest and weed seeds of concern to New Zealand.

I/We agree to recommend to growers only those sprays/chemicals that are listed in the Recommended Spray Charts issued by local Department authorities.

I/We agree to issue to growers records of findings of all field visits together with recommended corrective action when necessary. I/We further agree to maintain individual grower/commodity records for all growers to which I/we provide field monitoring services for. I/We agree to make all records pertaining to NZ BQA registered growers available to the Department of Agriculture/MPI for auditing purposes.

I/We agree to notify the Department of Agriculture immediately should any NZ BQA registered grower that we are performing advisory services for, fail to maintain their property in a hygienic manner as required under the terms and conditions of the NZ BQA and the instructions contained in the Systems Operation Manual for NZ BQA.

Signature .....

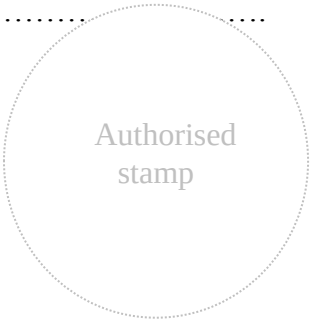
Printed Name ..... Date .....

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……



2.5 APPLICATION FOR EXPORTER REGISTRATION AND INSPECTION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT

Page 1 of 2

Name of Applicant (Exporter) .....
Address .....
.....
Phone Number .....

Contact Persons .....
(Actively involved in NZ Program) .....
Title .....

I/We have read and thoroughly understand the exporters' responsibility as contained in Australian - New Zealand Bilateral Quarantine Arrangement and the NZ BQA Systems Operation Manual (as amended).

I/We agree to abide by the requirements contained in the Arrangement at all times.

Exporters do not need to fill out exporter delegation functions immediately however, it is imperative that when exporters are to delegate any duty, the Department of Agriculture must be advised immediately and certainly before any duties are so performed. A facsimile transmission covering the points listed below will suffice as proper notification.

Exporter Inspection

The Company will be undertaking exporter inspection requirements under the NZ BQA and the Systems Operation Manual. This Company undertakes to use appropriately trained Quality Control persons who are aware of the regulated quarantine and phytosanitary quarantine pests that are of a concern to New Zealand.

The Company when undertaking Quality Control inspections for NZ BQA commodities will provide properly identified inspection records which will be signed by the person who undertakes the inspection.

Exporter Delegation of Inspection

The following parties and persons are hereby delegated by this Company and with agreement of those hereby nominated to perform export inspection duties for and on behalf of this Company.

Name	Company	Commodity	Address
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Page 2 of 2

Treatment Supervision Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform export treatments as required by the NZ BQA for and on behalf of this Company.

Company	Commodity	Address
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Loading Supervisory Authority

The following parties and persons are hereby delegated by this Company and with the agreement of those hereby nominated to perform load out supervision of NZ BQA commodities as is required by the NZ BQA and the contents of this Manual.

Company	Commodity	Address
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

We believe the above nominated persons have the necessary attributes to inspect produce for export to New Zealand on our behalf and have full knowledge of details that the NZ BQA and the Systems Operation Manual as amended required for inspection purposes

Name of Applicant ..... Signature .....
Date .....

Department of Agriculture Inspector: ……

Signature: ……

Regional Office: ……

Date: ……

Authorised stamp

2.6 INSPECTION RECORD

INSPECTION RECORD - NEW ZEALAND

Tick

Date	Trade Description .....
Commodity	Commodity .....
No of Cartons	Registered Grower No. .....
Registered Grower No.	Registered Packing Establishment .....
	.....
Ex 28/RFP Number/s:	Australian Origin .....
.....	
Ex 186 Number/s	Sample Size 450 - 600 - 950 - 1250
Exporter/s	(Tick one) .....
	Exporter Inspection completed by:.....
	(a) Exporter
Inspector Name	(b) ED (name)
(Block Letters)	**Inspected by**:
.....	Grower Line .....
Inspector's Signature	Consignment Line .....

Carton Number	**Number of Units**	**Total Units**	**Category**				
			RG3	**RG2**	**RG1**	**NR**	**Remarks**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

Passed ☐ **Failed** ☐ **Ex 161 Number/s (if failed).....**

NOTE:
RG 3 = Critical Quarantine Pest RG2 = Regulated Quarantine Pest RG1 = Phytosanitary Pest
NQ = Non Regulated Pest
****Please note, this is a template only: packhouse/ exporters are permitted to formulate their own copies of this template, provided all of the above information is contained. This form will be checked and approved at audit**

2.7 FUMIGATION RECORD

METHYL BROMIDE FUMIGATION RECORD - NEW ZEALAND	
Date	
Name of Fumigator	
Licensed Fumigator Number	
Registered Establishment Number	
Transfer Certificate (Ex 186) Number	
Overall Temperature Range	
Fumigation Rate	
Fumigation Chamber Volume	
Total Load as % of Chamber Volume	
Time of Vaporisation	
Time of Vent	

Grower Number	**Number of Cartons/Commodity**	**Temperatures Taken ***

REMARKS:

* of product at time of entry to fumigation

The thermometer used for temperature of product was calibrated on the .....(Date)

Signature ..... Date .....

DECLARATION

On .....(date) I, ... Department of Health Licensed Fumigator Number.....

of ..... fumigated the product described on EX 186 Number .....with methyl bromide in accordance with treatment specifications outlined in the agreement between the Department of Agriculture and the New Zealand Ministry for Primary Industries concerning the access of fruit fly host produce into New Zealand from Australia. The product described was fumigated at a rate of ..... g/m^3 with .....(name of fumigant) for ..... hours at a temperature range of ..... - ..... °C.

Signature

Date

NOTE: This declaration to be securely attached to the nominated EX186 (i.e. transfer certificate) prior to shipment.

2.8 COLD DISINFESTATION RECORD

ON SHORE COLD DISINFESTATION TREATMENT RECORD

DATE ..... COMMODITY RECEIVED .....
QUANTITY .....

PACKHOUSE NAME .....

EXPORTERS NAME .....
.....

LOT IDENTIFICATION .....

DATE CHAMBER LOADED ..... Cub Capacity.....

DATE CHAMBER REACHED 1 °C +/- 0 .6 °C.....

All Sensors/probes were calibrated using the ice slurry method on .....(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	Sensor

2.9 WITHDRAWAL NOTICE

WITHDRAWAL NOTICE

Following inspection of my/our premises/property by Department of Agriculture inspector

I, ... on .....
(Name) (Date)

I/We agree that my premises/property does not meet with the conditions as required by the Australia - New Zealand Bilateral Quarantine Arrangement and agree to the withdrawal of my/our registration under the Agreement until further notice.

I/We understand should I/we wish to re-enter the Arrangement protocol at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in block letters Signature Date

....

Voluntary Withdrawal

I/we agree my/our property is no longer required to be registered under the terms and conditions required for the New Zealand export trade for NZ BQA commodities.

I/we agree that our current registration be withdrawn from the New Zealand register. I/we understand should I/we wish to re-enter the Arrangement at a future date, I/we will have to request an initial audit of my/our property/premises and be assessed as satisfactory before registration will be issued.

Name in Block letters Signature Date

....

DEPARTMENT OF AGRICULTURE DOCUMENTATION Authorised person
Fax / email to State Office Inspector's signature
Appropriate Exporters Advised (State Office)
Grower Deleted from Active Register (State Office) .....

2.10 SUSPENSION NOTICE

SUSPENSION NOTICE

Following inspection/audit of the following property/premises:- (Grower – Packer – ED – Treatment Centre – Exporter – Freight Forwarder – Other ……) (select appropriate title)

Name .....
Address .....
.....
.....
Reg No .....

I believe for the following reasons that the entity outlined above no longer complies with the requirements of the Australia - New Zealand Bilateral Quarantine Arrangement and the related appendices:-

Description of Deficiency .....
.....
.....
.....
.....

and following discussions with .....(Name) they (please indicate):

have no intention to correct the above mentioned deficiency in the immediate future

OR

are suspended until corrective action has been implemented and successful re-audit has been undertaken

I hereby declare the entity outlined above is suspended from Appendix …….. (all, 4, 10 etc) of the Australia - New Zealand NZ BQA until further notice.

.....	.....	.....
Name in block letters	Inspector's Signature or Authorised Person	Date
.....	.....	.....
Representative Name	Representative Signature	Date

OFFICE DOCUMENTATION
Grower deleted from active Register (State Office)
Copy to State Office (fax)

2.11 DECLARATION OF DIMETHOATE TREATMENT

THIS DECLARATION TO ACCOMPANY THE TRANSFER OF DIMETHOATE TREATED COMMODITIES

I, ...of .....……

.....……...

hereby declare that the ..... cartons of

……..tomatoes/capsicums/cucumbers/rockmelons/hodewdew melons/scallopinis (circle as

applicable) consigned to..... .....……...on

..... (date) were harvested from the following registered

blocks……..

…… AND

1. have been subjected to (TICK AS APPLICABLE)

   (i) dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum period of one minute (tomatoes only).

   OR

   (ii) flood spraying with a solution of dimethoate of 400 ppm active ingredient. Fruit must not be handled for at least one minute after spraying (i.e. remain wet).

   AND

   the insecticide solution was freshly prepared immediately prior to use.

   Date of treatment.....

   AND

3. further declare ..... (insert name of supervisor) a designated person nominated by..... (insert name of exporter) has supervised the loading of this consignment for transport to .....(insert name of establishment or freight forwarder).

Declared at .....

this ..... day of .....20.....

Signature ..... Witness .....

2.12 CONTAINER REPORT SHEET

CONDITION OF HYGIENE OF SHIPPING CONTAINERS

Date.....

Shipping Container No. .....

Place of Inspection.....

Produce to be loaded a/c Exporters Name.....

Produce to be loaded as per EX28/RFP Nos.....
.....
.....
.....
.....

Inspection of Container

Condition of Floor.....
Roof .....
Walls.....
Doors.....

Detail any repairs made prior to loading

.....
.....
.....
.....

Signed..... Name in Block Letters.....

2.13 AVOCADO GROWER DECLARATIONPORT SHEET

EXPORT OF AVOCADOS TO NEW ZEALAND

GROWER DECLARATION

I/We.....

of.....declare the

Avocados, variety.....

in bins/packages marked.....were

harvested from block/farm No.....in which the trees are registered under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) or the Virus Tested Tree Registration Program (VTTR) and were propagated from stock tested and found to be free from Sun Blotch Viroid.

Signed.....

Position.....

Date.....

ATTACHMENT 3 ADDENDUM – TABLE GRAPES – IRRADIATION

In addition to appendices 2 (fruit fly area freedom) and 5 (cold storage disinfestation) grapes can be exported to New Zealand under appendix 12 (irradiation) of the NZ BQA/IHS.

The export of grapes to New Zealand must include the mandatory treatment of sulphur dioxide and carbon dioxide fumigation for redback spiders as detailed at Section 11 of this Manual.

During any inspection, should a pest be found that is not contained in the Pest Lists for that commodity, found on page 103, the pest must be regarded as a Quarantine Risk group 2 pest until official categorisation has been determined by the Department of Agriculture/MPI.

The following entities must be registered to export table grapes to New Zealand:

Commodity	**Treatment**	**Registration**					**Conditions**
		GR	**PR**	**TR**	**FF**	**ER**	
Grapes *Vitis vinifera*	Irradiation* *Appendix 12* *150 Gy*	✓	✓	✓	✓	✓	*Irradiation at 150 Gy can only occur if in-field pest control activities for the Risk group 2 pest *Conogethes punctiferalis* (yellow peach moth) are implemented throughout the production season otherwise irradiation at 289Gy
	Irradiation *Appendix 12* 289 Gy			✓	✓	✓	

Addendum record

Addendum No.	Entered by	Date added
1	M Mackrell	March 2019

AGREEMENT BETWEEN THE AUSTRALIAN QUARANTINE AND INSPECTION SERVICE (AQIS) AND MAF QUALITY MANAGEMENT ON BEHALF OF THE NEW ZEALAND MINISTRY OF AGRICULTURE AND FISHERIES CONCERNING THE ACCESS OF HOST MATERIAL OF HARMFUL FRUIT FLY SPECIES INTO NEW ZEALAND FROM AUSTRALIA

PURPOSE

The purpose of the Agreement is to prevent the establishment of harmful fruit fly species (family Tephritidae) in New Zealand as a result of importing possibly infested produce from Australia. The Agreement covers both accompanied and unaccompanied consignments.

The Agreement applies to those products listed in Appendix 1.

MAXIMUM PEST LIMIT (MPL)

The maximum pest limit for Tephritidae is 5 pests (any stage of life cycle) per million units (NB: The present MPL is an interim figure which will be modified on the publication of a more exact mathematical model[1]).

TREATMENT

All consignments[2] of fruit fly host material (both accompanied and unaccompanied) covered by the Agreement will be treated prior to arrival in New Zealand in such a manner to ensure that the MPL is not exceeded (see Appendices for individual treatment details).

POST TREATMENT SECURITY

Following treatment in Australia, the produce will be maintained in such a manner so as to prevent subsequent infestation (see Appendices).

PHYTOSANITARY CERTIFICATE ENDORSEMENT

All consignments, both passenger and commercial, must be accompanied by an International phytosanitary certificate which is to contain the following general endorsement:

> "This produce has been treated in accordance with the Agreement between the New Zealand Ministry of Agriculture and Fisheries and the Australian Quarantine and Inspection Service, concerning the access of (name of product) into New Zealand from Australia."

In addition, specific endorsements may be required (see Appendices).

---

[1]Baker, R.T., J.M.Cowley, D.S.Harte and E.R.Frampton. Development of a Maximum Pest Limit for Fruit Flies (Diptera : Tephritidae) in Produce Imported into New Zealand. Journal of Economic Entomology, Section Forum (In print).

[2]A consignment is the amount of produce covered by one phytosanitary certificate.

INSPECTION ON ARRIVAL IN NEW ZEALAND

(i) Unaccompanied Consignments

The New Zealand Ministry of Agriculture and Fisheries will examine 600 units[3] in every homogeneous consignment of produce on arrival in New Zealand. Methods of achieving homogeneity by Australia are described in the Appendices.

(ii) Accompanied Consignments (including passenger baggage)

The New Zealand Ministry of Agriculture and Fisheries will examine each unit of produce contained in the accompanied consignment.

CONTINGENCIES IN NEW ZEALAND

(i) Fruit Fly Host Material Not Covered By The Agreement

Such produce will not be permitted entry into New Zealand.

(ii) Fruit Fly Host Material Covered By The Agreement.

Detection of any fruit fly (egg, larva or adult), alive or dead (that is not within the tolerance set for each product) in either an unaccompanied or accompanied consignment will result in the rejection of that consignment. The Chief Plants Officer of MAF Quality Management will advise the Senior Assistant Director of the Plant Quarantine and Inspection Branch of AQIS that the product concerned will be removed from the ambit of the Agreement until the appropriate investigation has been carried out and the Chief Plants Officer is satisfied that the conditions of the Agreement can again be met at which stage the product will be reinstated under the Agreement.

Should there be more than one discrete production/quality pathway involved, all will be removed from the Agreement and only reinstated (as individuals or groups) as the results from the individual trace backs vindicate this.

Should an aspect of the pathway that is common to more than one product become suspect for a product, then that section of the pathway will no longer be applicable to the other products until the appropriate trace backs have been completed (eg if a fumigator is found to be suspect for one product then it follows that all other products passing through that particular fumigator will also be suspect. Or, if a fruit fly is found on a product that originates from a fruit fly free area then all products from that area will lose their area free status).

With regard to accompanied consignments (eg passenger baggage), should the package or the seal be broken/tampered with prior to inspection by the New Zealand Ministry of Agriculture and Fisheries, the produce will be rejected.

---

[3]The definition of a unit will vary with the particular product involved, eg individual fruit for citrus, a bunch for grapes and a cluster for bananas.

CONTINGENCIES BY AUSTRALIA

(i) Production

If there is any breach of the specifications required for a product pre export (as described in the appropriate Appendix), the Australian Quarantine and Inspection Service will take action in accordance with the procedures agreed for that particular product.

(ii) Detection of Fruit Fly in New Zealand

On receipt of advice from New Zealand of the detection of fruit fly exceeding the tolerance set for the particular product the Australian Quarantine and Inspection Service will not issue phytosanitary certificates covering the export of that product as well as removing the offending aspect of the pathway, if appropriate (eg common fumigator), until further advice from the MAF Quality Management Chief Plants Officer.

USE OF APPENDICES

Details of specific treatments (including production system/inspection/time of harvest/fumigation etc), post treatment security, phytosanitary endorsements and contingencies for each product covered by the Agreement are fully documented in the appropriate Appendix.

AUSTRALIAN QUALITY SYSTEMS AUDIT

The New Zealand Ministry of Agriculture and Fisheries reserves the right to audit all aspects of any treatment for any crop covered by an Appendix to the Agreement. Such audits will be in accordance with the International Standards Organisation 9000 series.

COMMUNICATION

The Senior Assistant Director of the Plant Quarantine and Inspection Branch of AQIS and the New Zealand MAF Quality Management Chief Plants Officer will communicate from time to time and, if appropriate, modify the Appendices. Likewise the Executive Director of the Australian Quarantine and Inspection Service and the Group Director of MAF Quality Management may if appropriate modify this Agreement.

May 1990

[redacted]

Acting Group Director
MAF Quality Management
Ministry of Agriculture and Fisheries
NEW ZEALAND

[redacted]

[redacted]

Acting Executive Director
Australian Quarantine And
Inspection Service
Department of Primary Industries and Energy
AUSTRALIA

APPENDIX 3 - Capsicum spp.
- includes capsicums, peppers, chillies etc.

1. MAXIMUM PEST LIMITS (MPLs)

1.1 The following MPLs will apply to capsicums.

A. Critical Quarantine Pests (MPL = 5 pests per million units)

Tephritidae (fruit flies)

B. Quarantine Pests (MPL = 0.5%)

Pests

Aphididae	(aphids)
Austroasca viridigrisea	(vegetable jassid)
Gonocephalum carpentariae	(Northern false wireworm)
Nysius vinitor	(Rutherglen bug)
Dindymus versicolor	(Harlequin bug)
Leptocoris mitellata	(leptocoris bug)
Plautia affinis	(green stink bug)
Henosepilachna spp.	(leaf-eating ladybirds)
Atherigona orientalis	(Muscid fly)

Seeds

Chondrilla juncea
Baccharis spp
Cenchrus spp
Tribulus spp
Eragrostis curvula
Sorghum halepense
Cyperus spp excepting C. brevifolius, C. eragrostis, C. esculentus, C. rotundus
Sorghum almum
Lycium spp expecting L. chinense and L. ferocissium
Pennisetum alopecuroides
Phragmites spp
Datura spp excepting D. stramonium and D. ferox
Xanthium spp excepting X. spinosum

C. Injurious Pests (MPL = 5%)

Pests

Heliothis armigera	(corn earworm)
Sceliodes cordalis	(eggfruit caterpillar)
Polyphagotarsonemus latus	(broad mite)
Chrysodeixis eriosoma	(green looper)
Spodoptera litura	(tropical armyworm)
Nezara viridula	(green vegetable bug)
Trialeurodes vaporariorum	(greenhouse whitefly)

Seeds

Xanthium spinosum
Datura ferox
Lycium ferocissium
Eragrostis spp. excepting *E. curvula*

D. Contaminants (MPL = 10%)

Spiders (excepting veneomous species), Oribatid mites, vinegar flies, etc.

1.2 If any pest is found on inspection of the produce in New Zealand, not listed in 1.1, it will be identified and assigned to one of the four categories and appropriate action will be taken. Any pest found that cannot be readily identified will initially assigned to category B, until it can be categorised. For the purposes of the agreement a pest is any live plant, animal or pathogen that is injurious, or potentially injurious, to plants or plant products, or may cause economic loss or harm to the environment.

2. COMPONENTS OF THE SYSTEM

2.1 On Farm Production

2.1.1 AQIS will register all growers who intend to produce capsicums for export to New Zealand. Only those registered growers will be covered by this Appendix and their registration identification will be on all packages.

2.1.2 The respective State Department of Primary Industries/Industry or Agriculture will recommend to registered growers a pest control programme designed primarily for fruit fly species and which also will control quarantine/injurious/ contaminant pests (as appropriate).

2.1.3 Growers will be required to keep a spray diary which will be available for monitoring and auditing purposes by AQIS. An initial audit of growing practices will be undertaken in the first week of the export season to check the diary and the phytosanitary condition of the farm. If any deficiencies are detected additional weekly audits will be undertaken until AQIS is satisfied that remedial action has been taken. Subsequent audits will be random but within a three month interval.

2.2 Packinghouse

2.2.1 Packinghouses intending to pack capsicums destined for New Zealand will be registered by AQIS and their registration identification will be included on all packages.

2.2.2 Packinghouse staff will inspect all fruit for freedom from fruit fly symptoms (eg. bruising, soft spots) and infestation by other pests and weed seeds, and reject such fruit accordingly. Auditing of packing house procedures will be undertaken concurrently and under the same frequency as in 2.1.3.

2.3 Exporters

2.3.1 Exporters intending to export capsicums destined for New Zealand will be registered by AQIS.

2.3.2 Exporters' declaration

Exporters will only present capsicums for export that have been grown/packed by registered growers/packers. This will be declared on the Notice of Intention to Export Prescribed Goods/Export Permit [EX28], in the following manner:

"The produce has been produced and packed according to the conditions prescribed in the Agreement between AQIS and MAF concerning the access of capsicums into New Zealand from Australia".

"Grower's name" ..... No. .....

"Packer's name" ..... No. .....

2.3.3 Exporter Inspection

Exporters or a delegated person appointed by the exporter will examine 600 fruit per grower line to check for conformity with the designated MPLs. Records of these examinations will be retained and be available for audit by AQIS. Grower lines which do not comply with the MPLs set by MAF will not be presented to AQIS for export to New Zealand. Auditing of the performance of exporters will be undertaken under the same frequency as in 2.1.3.

2.4 AQIS Inspection

Inspection will be carried out either on a consignment or a grower line basis (a consignment is the quantity of fruit covered by one phytosanitary certificate).

2.4.1 Consignment basis

For inspections on a consignment basis, produce can be from multiple grower/packer combinations. Homogeneity will be achieved by the growing, packing and exporter inspection process outlined above, prior to AQIS inspection.

2.4.2 Grower line basis

A homogeneous grower line is any number of capsicums from one grower presented for inspection at one time. This includes a grower line of capsicums that is presented for inspection that will subsequently be split into separate consignments for export to several destinations in New Zealand.

2.4.3 AQIS will inspect 600 pieces of fruit per consignment or per grower line. This sample must meet the following requirements:

- 0 fruit flies;
- 0 fruit infested by a Category B pest;
- 21 or less fruit infested by a Category C pest;
- 48 or less fruit infested by a Category D pest.

*p+1170X5

2.4.4 Consignments/ lines that meet these requirements will be identified, segregated and treated.

2.5 Treatment

2.5.1 Area-freedom - See Appendix 2. Unless an outbreak is current areas considered to be free of fruit flies are Tasmania, the Riverland district of SA, the Sunraysia districts of Vic and NSW and the Murrumbidgee Irrigation Area of NSW.

2.5.2 Chemical Treatment - For Areas with Fruit Flies.

2.5.2.1 Capsicums for export to New Zealand will be fumigated in AQIS registered fumigation facilities with EDB for 2 hours, in accordance with the following sliding scale for alternative flesh temperatures, and with a chamber loading not greater than 50%.

SLIDING SCALE OF TEMPERATURE VERSUS DOSE

CAPSICUM EDB FUMIGATION REQUIREMENTS

Flesh Temperature ^{o}C	Dosage in g/m^3
12 - 15	33
above 15 and below 20	29
20 or above	22

2.6 Post Treatment Security

2.6.1 Following fumigation, capsicums cleared for export will be identified in such a manner as to prevent substitution by unfumigated product by supervision of the loading and, if in-transit, the unloading of product by either an AQIS officer or by a designated person nominated by the exporter. When loading is by the exporter, AQIS will randomly audit the performance of this operation on a third of the occasions. Product will be stored in an insect-proof facility to prevent any subsequent infestation of the produce.

2.6.2 Insect proof storage is to be maintained during shipment.

2.7 Phytosanitary Certification

2.7.1 Phytosanitary certificates issued under this Appendix cannot include any crops other than capsicums (ie. no mixed consignments).

2.7.2 All phytosanitary certificates covering consignments of capsicums inspected in Australia as one grower line will be endorsed to this effect.

2.7.3 As well as the general endorsement (see Agreement) AQIS will provide a phytosanitary certificate with either of the following additional statements;

(i) "The product was fumigated with ethylene dibromide at ......g/m^3 for 2 hours at a flesh temperature of ......^{0}C at a loading of not greater than 50%"

(ii) "The product was grown and packed in an area not less than 80 km from an area where damaging species of fruit fly (F.Tephritidae) exist."

2.8 Accompanied Consignments

2.8.1 Passengers and crew may take capsicums with them to NZ provided the following requirements are met.

2.8.1.1 AQIS will inspect each capsicum and if free from fruit fly and other pests the fruit will then be fumigated.

2.8.1.2 Following fumigation in accordance with 2.5.2.1 the fruit will be placed in a package sealed with an AQIS seal.

2.8.1.3 AQIS will issue and endorse the phytosanitary certificate as in 2.7.

3. CONTINGENCY PLANS - WITHIN AUSTRALIA

3.1 On Farm Production

3.1.1 Un-registered grower. AQIS will not issue a phytosanitary certificate for any capsicums produced by any grower who is not registered under this Appendix.

3.1.2 AQIS will de-register any grower who causes AQIS to doubt his or her ability to fulfil the requirements of this Appendix. However, AQIS may re-register the grower when it is satisfied the requirements of the Appendix can again be met.

3.2 Packinghouse

3.2.1 Any packinghouse that is found not to be conducting inspections for pests and weed seeds in accordance with Section 2.2.2 will be de-registered by AQIS. It will be prevented from packing for export until such time as AQIS conducts an appropriate audit and is satisfied that the packinghouse can again meet the requirements of the Appendix.

3.2.2 If a packing house detects any live fruit flies the growers lot being packed will be rejected for export to New Zealand. No further lines from that grower will be packed until remedial action has been undertaken.

3.3 Exporters

3.3.1 Should an exporter accept produce from an un-registered grower or packinghouse then AQIS will suspend the exporter from exporting under this Appendix until such time as AQIS can be satisfied that the exporter will comply with the requirements of the Appendix.

3.3.2 If on AQIS audit an exporter is found not to be complying with the requirements of Section 2.3.2 the exporter will be suspended from the Appendix until such time as AQIS can be satisfied that compliance will again be achieved.

3.4 AQIS Inspection

3.4.1 AQIS inspectors in issuing Export Permits for capsicums to New Zealand will ensure that all growers' and packers' are registered under the Appendix and that their identification is on all packages. Failure to meet these requirements will disqualify the product from export to New Zealand.

3.4.2 Should a consignment or grower line exceed the MPLs set by MAFQM, then AQIS will reject the consignment/ grower line and not issue a phytosanitary certificate for that consignment/ grower line.

3.4.3 If during inspection by AQIS evidence of fruit fly infestation is detected, the grower, packer and exporter identified in the audit as having provided the affected fruit will on the first incident be advised. If the same grower, packer or exporter is identified in a subsequent incident in the same calendar year, further exports of capsicums to New Zealand by that grower, packer or exporter will be suspended for the remainder of that calendar year.

4. CONTINGENCY PLANS - WITHIN NEW ZEALAND

4.1 Inspection for fruit fly on arrival in New Zealand

4.1.1 Unaccompanied consignments

MAF will examine 600 units[1] in every consignment or grower line, on arrival in New Zealand.

4.1.2 Accompanied consignments

MAFQM will examine each unit in the accompanied consignment. If the package is broken, or the seal destroyed (or tampered with) MAFQM will destroy the produce.

4.2 Action taken on Detection of Fruit Fly

4.2.1 MAFQM will take action as described in the Agreement.

4.3 Inspection for Other Pests and Contaminants

4.3.1 Quarantine Pests

Any detection of live pests or weed seeds in a 600 unit sample will result in the consignment/line being treated and AQIS notified. Where a treatment is not available the importer may have the option of having the consignment/line sorted, reshipped or destroyed.

4.3.2 Injurious Pest

Detection of more than 21 infested units with live pests or weed seeds in the 600 unit sample will result in the consignment/line being treated.

---

1 Unit is an individual capsicum fruit.

4.3.3 Contaminants

Detection of more than 48 infested units with live contaminants in the 600 unit sample will result in the consignment/line being treated.

4.3.4 Soil Contamination

Detection of more than 25ml of soil in a 600 unit sample will result in the consignment/ grower line being treated.

4.4 AQIS Systems Audit

4.4.1 MAFQM reserves the right to conduct random audits of the AQIS system.

4.4.2 Should these audits identify a critical non-compliance with the stated requirements, MAFQM will suspend this Appendix (and others if appropriate) until satisfied that corrective action has been taken by AQIS.

August 1990

[redacted]
Chief Plants Officer
Ministry of Agriculture
and Fisheries
NEW ZEALAND

[redacted]
Senior Assistant Director
Plant Quarantine and
Inspection Branch
Australian Quarantine and
Inspection Service
Department of Primary
Industries and Energy
AUSTRALIA

5517J

APPENDIX 5 TO BILATERAL QUARANTINE AGREEMENT - Citrus spp - includes oranges, lemons, mandarins etc.

1. MAXIMUM PEST LIMITS (MPLs)

1.1 The following MPLs will apply to citrus.

A. Critical Quarantine Pests (MPL = 5 pests per million units)

Tephritidae (fruit flies)

B. Quarantine Pests (MPL = 0.5%)

Pests

Caterpillars - except Spodoptera litura and Epiphyas postvittana (light brown apple moth)
Beetles - leaf chewing
Weevils - except Fuller's Rose weevil (Asynonychus cervinus)
Sucking bugs - except Nezara viridula
Mites (except Citrus Red Mite)
Aphids
Mealy bug (Dysmicoccus sp)
Argentine Ant
Fruit Maggots (Atherigona sp)

Seeds

Chondrilla juncea
Baccharis spp.
Cenchrus spp.
Tribulus spp.
Eragrostis curvula
Sorghum halepense
Cyperus spp excepting C. brevifolius, C. eragrostis, C. esculentus, C. rotundus
Sorghum almum
Lycium spp. excepting L. chinense and L. ferocissimum
Pennisetum alopecuroides
Phragmites spp.
Datura spp.excepting D. stramonium and D. ferox
Xanthium spp. excepting X. spinosum

Diseases

Black Spot (Guignardia sp)

C. Injurious Pests (MPL = 5%)

Pests

White flies (Aleyrodidae)
Scales
Mealybugs (other than Dysmicoccus)
Thrips
Plant Hoppers
Snails
Ants (other than Argentine)
Citrus Red Mite
Nezara viridula
Asynonychus cervinus
Spodoptera litura
Epiphyas postvittana

Diseases

Elsinoe fawcettii scab
Septoria citri

Weeds
Xanthium spinosum
Datura ferox
Lycium ferocissimum
Lycium chinense
Eragrostis spp. excepting E. curvula

D. Contaminants (MPL = 10%)

Pests

Spiders (other than venomous)
Predatory Mites
Parasitic Wasps
Vinegar Fly (Drosophilidae)
Obviously harmless
"hitchhiker" pests

Diseases

Penicillium moulds
Sour Rot
(Geoctrichum candidum)
Melanose
(Diaporthe citri)
Alternaria Rot
(Alternaria citri)

1.2 If any pest is found on inspection of the produce in New Zealand not listed in 1.1, it will be identified and assigned to one of the four categories and appropriate action will be taken. Any pest found that cannot be readily identified will initially be assigned to category B, until it can be categorised. For the purposes of the agreement a pest is any live plant, animal or pathogen that is injurious, or potentially injurious, to plants or plant products, or may cause economic loss or harm to the environment.