

2. COMPONENTS OF THE SYSTEM

2.1 On Farm Production

- 2.1.1 Growers who intend to produce citrus for export to New Zealand will sign a declaration of intent to this effect. This declaration will be held by the packing house and be available for inspection by AQIS at any time. Packing houses will only source fruit for export to New Zealand from growers who have a current 'declaration'.
- 2.1.2 Growers supplying fruit for New Zealand will undertake a pest control program for fruit fly species (where the area is not free from fruit flies) and for quarantine/injurious/ contaminant pests (as appropriate).
- 2.1.3 Details of the program undertaken are to be retained for auditing. The performance of the spray program will be monitored by the packing houses. An initial audit will be undertaken in the first week of the export season to check the grower's spray program and phytosanitary condition of the orchard. If any deficiencies are detected additional weekly audits will be undertaken until the problem has been corrected. Subsequent audits will be random but within a three month interval.

2.2 Packing house

- 2.2.1 Packing houses intending to pack citrus destined for New Zealand will be registered by AQIS and their registration identification will be included on all packages.
- 2.2.2 Packing house staff will inspect all fruit for freedom from fruit fly symptoms, (eg bruising or soft spots) and infestation by other pests and weed seeds, and reject such fruit accordingly.
- 2.2.3 A designated packing house quality controller will sample 600 fruit per grower line to check conformity with the MPLs listed in 1.1. Records of these inspections will be retained for auditing by AQIS. Grower lines not complying with the MPLs will not be presented for export to New Zealand. Auditing of packing house procedures will be undertaken under the same frequency as in 2.1.3.

2.3 Exporters

2.3.1 Exporters' declaration

Exporters will only present citrus for export that has 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 MAFQM concerning the access of citrus into New Zealand from Australia".

"Packer's name" No.

2.4 AQIS Inspection

Inspection will be carried out either on a consignment or a grower line basis.

2.4.1 Consignment basis

For inspections on a consignment basis, produce can be from multiple grower/packer combinations. Homogeneity will be achieved by measures outlined in 2.1 and 2.2.

2.4.2 Grower line basis

A homogeneous grower line is any number of citrus from one grower presented for inspection at one time. This includes a grower line of citrus 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.

2.4.4 Consignments/lines that meet these requirements will be identified, segregated and treated as appropriate.

2.5 Treatment

2.5.1 Area-freedom - See Appendix 2 to the Bilateral Quarantine Agreement. 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 Physical or Chemical Treatment - For Areas with Fruit Flies.

2.5.2.1 Citrus from outside a fruit fly free area or from a property in a declared outbreak area (see Appendix 2 to the Bilateral Quarantine Agreement) is to undergo either of the following disinfestation treatments:

- (i) Cold disinfestation - Fruit is to be subjected to a core temperature of 1°C plus or minus 0.6°C for 16 days at premises registered under this Agreement. The temperature of the fruit will be recorded by the packing shed quality controller twice daily (morning and afternoon). These records will be monitored by an AQIS inspector every 4 days. Monitoring will be by a minimum of 4 probes inserted into fruit in 4 different pallets.
- (ii) Fumigation - Fruit is to be fumigated with ethylene dibromide for 2 hours in a chamber loaded to not more than 50% of capacity, at one of the following rates:

Temperature	g/m ³
21°C or above	18
15.5°C - 21°C	25
10°C - 15.5°C	32

NB The fumigation option is likely to cease on 31 December 1990.

2.6 Post Treatment Security

- 2.6.1 Following treatment citrus cleared for export will be identified in such a manner as to prevent substitution by untreated 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 product.
- 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 citrus (ie. no mixed consignments).
- 2.7.2 All phytosanitary certificates covering consignments of citrus inspected in Australia as one grower line will be endorsed to this effect.
- 2.7.3 As well as the general endorsement (see Bilateral Quarantine Agreement) AQIS will provide a phytosanitary certificate with one of the following additional statements;

- (i) "The product was grown and packed in an area not less than 80km from an area where damaging species of fruit fly (F. Tephritidae) exist."
- (ii) "This consignment was subjected to a cold disinfestation treatment of 16 days at 1°C plus or minus 0.6°C for the control of fruit flies"
- (iii) "This consignment was fumigated with ethylene dibromide for 2 hours, in a chamber loaded to not more than 50% capacity, at a concentration of ..g/m³ and a temperature of ..°C."

3. CONTINGENCY PLANS - WITHIN AUSTRALIA

3.1 On Farm Production

3.1.1 Packing houses will not accept any citrus for export to New Zealand from growers who have not lodged a declaration of intent with the packing house.

3.1.2 Packing houses will cease to source fruit from any grower who causes the packing house to doubt his or her ability to fulfil the requirements of this Appendix.

3.2 Packing house

3.2.1 Any packing house that is found to be sourcing fruit from growers who do not have a current declaration of intent or are not conducting inspections for pests and weed seeds in accordance with 2.2.2, will be de-registered by AQIS. It will be prevented from packing for export under this Appendix until such time as AQIS conducts an appropriate audit and is again satisfied that the system can again meet the requirements of this Appendix.

3.2.2 If a packing house detects any fruit flies or infested fruit, the fruit will be rejected for export to New Zealand. No further lines from that grower will be packed until remedial action has been taken.

3.2.3 The finding of fruit fly in citrus will result in the additional action, if sourced from an area with 'Area-freedom' status

- An outbreak declaration will be made by the relevant State Department of Agriculture and eradication procedures will be initiated
- Area-freedom certification for fruit originating within an 80km radius of the outbreak site will be suspended
- All citrus from within the 80km zone will be subjected to a cold disinfestation or fumigation as in 2.5.2 on declaration of an outbreak

.. fruit that is in store in an insect proof facility prior to declaration of the outbreak will not require treatment.

3.3 Exporters

3.3.1 Exporters in applying for Export Permits [EX 28] for citrus to New Zealand will not include packing houses on the Notice that are not registered under this Appendix.

- 3.3.2 Should an exporter be found to have accepted produce from an un-registered packing house then AQIS will suspend the exporter from this Appendix until such time as AQIS can be satisfied that the exporter will comply with the requirements of this Appendix.

3.4 AQIS Inspection

- 3.4.1 AQIS inspectors in issuing Export Permits for citrus to New Zealand will ensure that all 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 subsequent audit as having provided the affected fruit will on the first incident be advised. If the same grower, packer and exporter is identified in a subsequent incident in the same calendar year, further exports of citrus to New Zealand by that grower, packer and 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

MAFQM will examine 600 units¹ in every consignment or grower line, on arrival in New Zealand.

4.2 Action taken on Detection of Fruit Fly

4.2.1 Detection of any live fruit fly (egg, larva or adult), or, 3 or more fruit containing dead fruit flies (eggs, larvae or adults) in either an unaccompanied consignment/grower line or an accompanied consignment will result in the rejection of that consignment/line.

4.2.2 Detection of any fruit fly, alive or dead, from an area with area-freedom status will result in the suspension of the area free status. The consignment and others in transit will be rejected.

4.3 Inspection for Other Pests and Contaminants

4.3.1 Quarantine Pests

Any detection of live pests in the sample will result in the consignment/line being treated and AQIS notified. Where a treatment is not available (eg. weed seeds) the importer will have the option of having the consignment/line sorted, reshipped or destroyed.

¹ Unit is an individual fruit.

4.3.2 Injurious Pest

Detection of more than 21 infested or infected units with live pests in the 600 unit sample will result in the consignment/line being treated.

4.3.3 Contaminants

Detection of more than 48 infested or infected 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 stated requirements, MAFQM will suspend this Appendix (and others if appropriate) until satisfied that corrective action has been taken by AQIS.

August 1990

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Chief Plants Officer
MAFQM
Ministry of Agriculture
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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		29 April 2002
5A		18 March 2002
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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, Shepparton Irrigation Region and the 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.

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 (i.e. the Ord River Irrigation Area including the districts and townships of Kununurra, Packsaddle Plain, Maxwell Plains, Ivanhoe Plain and the areas north of the townsite of Kununurra and the area 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 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 avocados 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 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*":

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".

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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]	PO Box 222 Hamilton Queensland 4007	4
AQIS Brisbane Office State Contact Officer (C/A) Attn [REDACTED]	PO Box 222 Hamilton Queensland 4007	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

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March 2003



SYSTEMS OPERATIONS MANUAL

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

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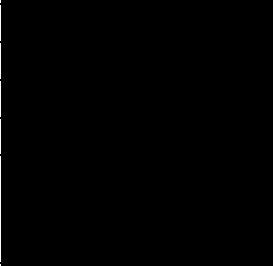
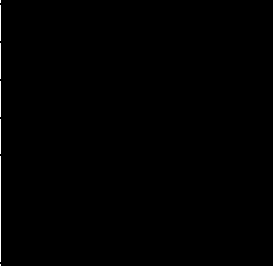
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AMENDMENT RECORD

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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3.12 Irradiation treatment

IRRADIATION IS KNOWN AS APPENDIX 12 TO THE BQA

Mangoes currently are the only commodity 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 arthropod pests listed on the Mango pest list.

3.12.1 Registration requirements

Growers

- Growers are not required to be registered under this appendix

Packinghouse

- Packhouses are not required to be registered under this appendix

Treatment centre

- Mangoes - irradiation 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.

Exporter

- All products - exporters of approved 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 12 to the BQA.

NOTE: Inspection may be carried out either prior to or after treatment. The inspection is to detect non target pests, if live arthropods are detected during inspection then no action is to be taken. NB. if live fruit flies (eggs, larvae, or adults) are detected during post treatment inspection they should be forwarded to AQIS entomologists for assessment.

Should pests be detected that are not listed in the pest list for mangoes found in Appendix 1.7 then the pests are to be regarded as actionable until a determination is made by NZMAF.

Should live regulated pests be found during New Zealand MAF on-arrival inspections of treated fruit, NZMAF will make a decision on action to be taken on a case-by-case basis.

3.12.2 Treatment details and treatment centre responsibilities

The treatment rate specified by NZMAF for Mangoes exported from Australia is Dmin 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> .

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.

Process Controls

All treatment centres that are registered for the New Zealand BQA trade must have an auditable system of process controls and record keeping.

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.

Treatment centres will be required to carry out treatment verification testing to determine that 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/NZMAF on request.

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

3.12.2.1 Irradiation treatment procedures

Registered treatment centres must have documented procedures in place for receipt, identification, segregation, and despatch of all New Zealand destined fruits and marking/labelling all New Zealand BQA/IHS 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 that the minimum absorbed dose (D_{min}) 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 than the D_{min} may be required to ensure that the D_{min} is achieved throughout the configured consignment or lot, these doses must not exceed the D_{max} .

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 New Zealand 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 Senior Inspector AQIS prior to season commencement outlining security procedures and product movement, this system will be subjected to random monitoring throughout season. If goods are travelling interstate then a transfer certificate 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 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.

The following specific requirements must be in place to enable irradiation treatment centres to become registered for the New Zealand program:

Dosimetry

Dosimetry ensures that the required Dmin for a particular commodity was delivered to all parts of the consignment.

- dosimetry system must be capable of recording/measuring the entire range of dosages likely to be received by the product (Dmin & Dmax);
- dosimetry system must be 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;
- Dosimeters must be appropriate for the treatment conditions (ie temperature etc in the treatment chamber);
- Dosimeters must be evaluated for stability against the effects of variables such as light, temperature, humidity, storage time, and the type and timing of analyses required;
- Dosimetry must consider variations due to density and composition of the material treated, variations in shape and size, variations in orientation of the product, stacking, volume and packaging;
- Dose mapping of the product in each geometric packing configuration, arrangement and product density that will be 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 organization 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 that 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.

3.12.3 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 for at least one year 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. In most cases, these records are required under other authorities, but these records must also be made available to the AQIS on request.

Records kept by the 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;
- any observed deviation 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:

- 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.

3.12.4 Auditing requirements – irradiation centres

AQIS requirements

There is no requirement for AQIS inspectors to attend each irradiation disinfestation treatment, however, AQIS inspection staff will undertake analysis of system controls and pathways 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.

The Senior Inspector (Exports) will be responsible for arranging an audit schedule for irradiation facilities and will consider the number and size of treatments being undertaken in determining frequency of audits. It is recommended that each facility should be audited at least twice during the operating season.

Audits will cover the receipt (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.

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 reoccur.

3.12.5 Post treatment security & transportation

Once treatment has completed, the product must be maintained in such a way so as to ensure reinfestation cannot occur.

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.

NB Treated commodities will only be certified and released after dosimetry measurements confirm that the Dmin was met.

3.12.6 Phytosanitary certificate endorsements

General endorsement - 1

"The produce (name) in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS."

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† 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	✓	✓	✓		✓	<ul style="list-style-type: none"> - "The avocados 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 avocados in this 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 avocados in this consignment have undergone appropriate pest control activities that are effective against <i>Pseudocercospora purpurea</i> 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	✓	✓	✓	✓	✓	<ul style="list-style-type: none"> - "The avocados 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 avocados in this 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 avocados in this consignment have undergone appropriate pest control activities that are effective against <i>Pseudocercospora purpurea</i> 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	✓	✓	✓		✓	<ul style="list-style-type: none"> - "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"

‡ 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	
Capsicum‡	Dimethoate (spray only) 400ppm and fruit must be sprayed for a minimum of one minute	✓	✓	✓	✓	✓	<ul style="list-style-type: none"> - "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". - 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	Area freedom	QLD	QLD	✓		✓	<ul style="list-style-type: none"> - "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 <i>Guignardia citricarpa</i>"
Citrus	Cold storage 1°C (±0.6°C) for 16 days or 0°C or below for not less than 13 days	QLD	QLD	✓	✓	✓	<ul style="list-style-type: none"> - "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 <i>Guignardia citricarpa</i>"
Cucumber	Area freedom			✓		✓	<ul style="list-style-type: none"> - "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"

‡ 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	
Cucumber†	Dimethoate (dip only) 400ppm and fruit must remain submersed for one minute	✓	✓	✓	✓	✓	<ul style="list-style-type: none">- "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	✓	✓	✓	✓	✓	<ul style="list-style-type: none">- "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	✓	✓	✓	✓	✓	<ul style="list-style-type: none">- "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 <i>Latrodectus hasselti</i> and <i>Conogethes punctiferalis</i>”- "The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from <i>Maconellicoccus hirsutus</i>"

‡ 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	✓	✓	✓	✓	✓	<ul style="list-style-type: none"> - "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 <i>Latrodectus hasselti</i> and <i>Conogethes punctiferalis</i>" - "The grapes in this consignment have been sourced from an area free (verified by an official detection survey) from <i>Maconellicoccus hirsutus</i>"
Honeydew	Area freedom			✓		✓	<ul style="list-style-type: none"> - "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	✓	✓	✓	✓	✓	<ul style="list-style-type: none"> - "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	✓	✓	✓		✓	<ul style="list-style-type: none"> - "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	Irradiation				✓	✓	- "The mangoes in this consignment have been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS."
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			✓		✓	<ul style="list-style-type: none"> - "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				✓	✓	<ul style="list-style-type: none"> - "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	✓	✓	✓		✓	<ul style="list-style-type: none"> - "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			✓		✓	<ul style="list-style-type: none"> - "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	✓	✓	✓	✓	✓	<ul style="list-style-type: none"> - "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			✓		✓	<ul style="list-style-type: none"> - "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				✓	✓	<ul style="list-style-type: none"> - "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			✓		✓	<ul style="list-style-type: none"> - "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	✓	✓	✓	✓	✓	<ul style="list-style-type: none"> - "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"
Watermelon	Area freedom			✓		✓	<ul style="list-style-type: none"> - "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	✓	✓	✓	✓	✓	<ul style="list-style-type: none"> - "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	✓	✓	✓		✓	<ul style="list-style-type: none"> - "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
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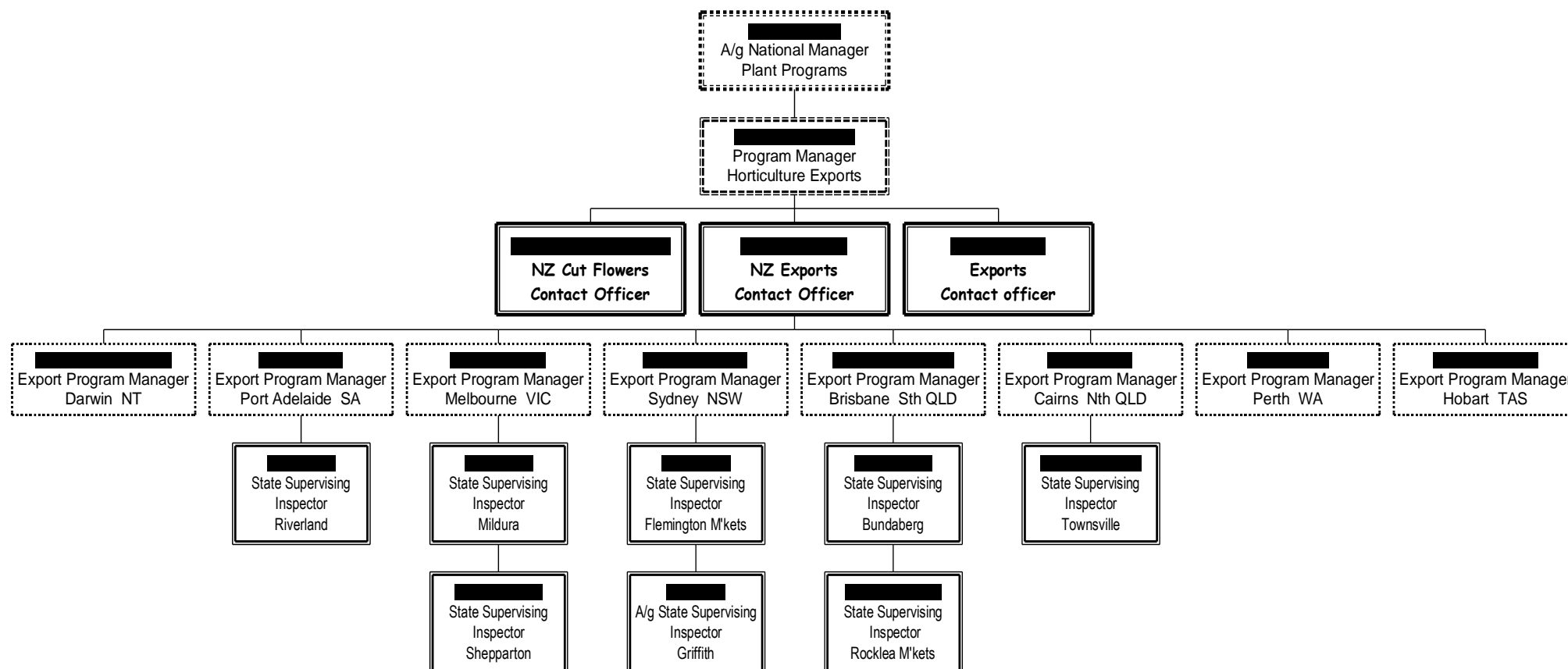
‡ the commodity/treatment also requires in-field controls
 GR grower registration required
 GM grower monitoring and spray diaries required

PR packinghouse registration required
 TR treatment registration required
 ER exporter registration required

		GR	GM	PR	TR	ER	
Zucchini	Area freedom			✓		✓	<ul style="list-style-type: none"> - "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				✓	✓	<ul style="list-style-type: none"> - "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"

Attachment 1 to Section 4 – AQIS Plant Contact List

AQIS Plant Contact List



DISTRIBUTION OF MANUALS - CONTROLLED COPIES

Holders	Address	Copy Number
A/g National Manager Plant Programs Plant Programs Branch Attn. [REDACTED]	Canberra Office	1
Manager Horticulture Exports Program Plant Programs Branch Attn [REDACTED]	Canberra Office	2
New Zealand Contact Officer Horticulture Exports Program Plant Programs Branch Attn [REDACTED]	Canberra Office	3
AQIS Brisbane Office Senior Inspector Exports Attn [REDACTED]	PO Box 222 Hamilton Queensland 4007	4
AQIS Brisbane Office State Contact Officer (C/A) Attn [REDACTED]	PO Box 222 Hamilton Queensland 4007	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

1.7 Mango, *Mangifera indica*

MANGO

Mangifera indica

Mangoes can be exported to New Zealand under the Appendix No. 12 - Irradiation of the 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
<i>Bactrocera aquilonis</i>	Northern Territory Fruit Fly
<i>Bactrocera cucumis</i>	cucumber Fruit Fly
<i>Bactrocera frauenfeldi</i>	fruit Fly
<i>Bactrocera jarvisi</i>	jarvis' fruit fly
<i>Bactrocera kraussi</i>	fruit Fly
<i>Bactrocera murrayi</i>	fruit Fly
<i>Bactrocera neohumeralis</i>	lesser Queensland fruit fly
<i>Bactrocera opiliae</i>	false Oriental Fruit Fly
<i>Bactrocera tryoni</i>	Queensland fruit fly
<i>Ceratitidis capitata</i>	Mediterranean fruit fly
<i>Dirioxa pornia</i>	island Fruit Fly
<i>Amblypelta lutescens</i>	banana spotting bug
<i>Amblypelta nitida</i>	fruit spotting bug
<i>Aonidiella orientalis</i>	oriental yellow scale
<i>Aspidiotus destructor</i>	coconut scale
<i>Aulacaspis tubercularis</i>	common mango scale
<i>Campylomma liebkei</i>	apple dimpling bug
<i>Ceroplastes rubens</i>	red wax scale
<i>Chinophasma fimbriata</i>	
<i>Chlumetia euthysticha</i>	small mango tipborer
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Chrysomphalus dictyospermi</i>	dictyospermum scale
<i>Coccus viridis</i>	green scale
<i>Colgaroides acuminata</i>	mango planthopper
<i>Conogethes punctiferalis</i>	yellow peach moth
<i>Cryptoblabes adoceta</i>	false blossom moth
<i>Cryptoptila immersana</i>	ivy leafroller
<i>Deanolis albizonalis</i>	mango fruit borer
<i>Dudua aprobola</i>	leaf curling moth
<i>Eucyclodes pieroides</i>	bizarre looper
<i>Eudocima fullonia</i>	fruit-piercing moth
<i>Eudocima materna</i>	fruit-piercing moth
<i>Eudocima salamina</i>	fruit-piercing moth

1.7 Mango, *Mangifera indica*

<i>Eudocima tyrannus</i>	fruit-piercing moth
<i>Frankliniella schultzei</i>	flower thrips
<i>Heliothrips haemorrhoidalis</i>	greenhouse thrips
<i>Helopeltis clavifer</i>	
<i>Icerya aegyptiaca</i>	Egyptian fluted scale
<i>Idioscopus clypealis</i>	mango hopper
<i>Idioscopus nitidulus</i>	mango hopper
<i>Ischnaspis longirostris</i>	black thread scale
<i>Isotenes miserana</i>	orange fruitborer
<i>Lobesia sp.</i>	European grape berry moth
<i>Monolepta australis</i>	red-shouldered leaf beetle
<i>Monolepta divisa</i>	small monolepta beetle
<i>Nipaecoccus vastator</i>	karoo thorn mealybug
<i>Ophiusa tirhaca</i>	
<i>Penicillaria jocosatrix</i>	mango tipborer
<i>Phenacaspis dilatata</i>	mango scale
<i>Planococcus citri</i>	Citrus mealybug
<i>Pseudaulacaspis cockerelli</i>	Cockerell's scale
<i>Rastrococcus sp.</i>	
<i>Rhyparida limbatipennis</i>	
<i>Saissetia miranda</i>	Mexican black scale
<i>Selenothrips rubrocinctus</i>	redbanded thrips
<i>Sternochetus mangiferae</i>	mango seed weevil
<i>Asterina punctiformis</i>	
<i>Chaetothyria tenuissima</i>	stem sooty blotch
<i>Cytosphaera mangiferae</i>	stem-end rot
<i>Elsinoe mangiferae</i>	mango scab
(anamorph <i>Sphaceloma mangiferae</i>)	
<i>Fusicoccum mangiferae</i>	
<i>Nattrassia mangiferae</i>	stem-end rot
<i>Pestalotiopsis mangiferae</i>	grey leaf spot of mango
<i>Pestalotiopsis mangifolia</i>	storage rot
<i>Pestalotiopsis theae</i>	mango blight
<i>Pestalotiopsis virgatula</i>	mango leaf spot
<i>Phomopsis mangiferae</i>	stem end rot
<i>Pythium mangifera</i>	mango powdery mildew
(anamorph <i>Oidium mangiferae</i>)	
<i>Schizoparme straminea</i>	
(anamorph <i>Coniella</i>)	schizoparme fruit rot

Non-regulated pests

Pest Scientific Name

Common Name

<i>Aonidiella aurantii</i>	California red scale
<i>Ceroplastes destructor</i>	white wax scale
<i>Epiphyas postvittana</i>	light brown apple moth
<i>Helicoverpa armigera</i>	tomato fruitworm
<i>Heliothrips haemorrhoidalis</i>	greenhouse thrips

1.7 Mango, *Mangifera indica*

<i>Hemiberlesia lataniae</i>	latania scale
<i>Hemiberlesia rapax</i>	greedy scale
<i>Icerya purchasi</i>	cottony cushion scale
<i>Parasaissetia nigra</i>	nigra scale
<i>Pseudococcus longispinus</i>	long tailed mealybug
<i>Saissetia coffeae</i>	helmet scale
<i>Toxoptera aurantii</i>	black citrus aphid
<i>Toxoptera citricida</i>	brown citrus aphid
<i>Polyphagotarsonemus latus</i>	broad mite
<i>Tetranychus urticae</i>	twospotted spider mite
<i>Alternaria alternata</i>	black stalk rot
<i>Botryosphaeria dothidea</i>	canker
(anamorph <i>Fusicoccum aesculi</i>)	
<i>Botryosphaeria parva</i>	canker
(anamorph <i>Fusicoccum parvum</i>)	
<i>Botryosphaeria rhodina</i>	gummosis
<i>Botryosphaeria ribis</i>	canker
(anamorph <i>Lasiodiplodia theobromae</i>)	
<i>Botryotinia fuckeliana</i>	grey mould
(anamorph <i>Botrytis cinerea</i>)	
<i>Cladosporium cladosporioides</i>	cladosporium leaf spot
<i>Cochliobolus hawaiiensis</i>	leaf spot, seed rot
<i>Colletotrichum acutatum</i>	anthracnose
<i>Colletotrichum coccodes</i>	anthracnose
<i>Dipodascus Geotrichum</i>	sour rot
(anamorph <i>Geotrichum candidum</i>)	
<i>Dothiorella aromatica</i>	stem-end rot
<i>Epicoccum purpurascens</i>	black mould
<i>Erysiphe cichoracearum</i>	powdery mildew
(anamorph <i>Oidium asterispunicea</i>)	
<i>Fusicoccum luteum</i>	bunch rot
<i>Glomerella cingulata</i>	anthracnose
(anamorph <i>Colletotrichum gloeosporioides</i>)	
<i>Glomerella lagenaria</i>	
(anamorph <i>Colletotrichum orbiculare</i>)	
<i>Pestalotiopsis funealis</i>	leaf spot
<i>Pestalotiopsis versicolor</i>	pestalotiopsis rot
<i>Phytophthora nicotianae</i>	buckeye rot
<i>Pithomyces chartarum</i>	facial eczema fungus
<i>Pleospora allii</i>	
(anamorph <i>Stemphylium vesicarium</i>)	
<i>Rhizopus stolonifer</i>	black mould
<i>Thanatephorus cucumeris</i>	rhizopus soft rot
(anamorph <i>Rhizoctonia solani</i>)	rhizoctonia rot

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December 2004



SYSTEMS OPERATIONS MANUAL

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

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APPLICATION FOR TREATMENT CENTRE REGISTRATION AUSTRALIA - NEW ZEALAND BILATERAL QUARANTINE ARRANGEMENT and NEW ZEALAND IMPORT HEALTH STANDARDS			
NAME OF TREATMENT CENTRE			
AQIS REE NUMBER			
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 Operational Manual – Amendment 5b of Dec 2004 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)			

nz bqagen/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**

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AQIS Adelaide Office A/g 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
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Dept of Agriculture W.Aust State Contact Officer Attn [REDACTED]	PO Box 1410 Canning Vale 6155	13

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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]	PO Box Griffith NSW	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]	Townsville	23
AQIS Riverland Office Attn [REDACTED]	PO Box 411 Loxton	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.

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 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 pests 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	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 Forestry (MAF), to ensure New Zealand's 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 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), 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 official 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 reshipe 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 reshipe 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 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 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

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

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 outbreak 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

Packinghouses of fruits sourced from area freedom districts must maintain a packing regime that will separate fruits from each area. Each consignment shipped to New Zealand must be sourced from growers in one area only (as defined above) and must not be 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 declared 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.

Notwithstanding 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.

Notwithstanding 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 $\pm 6\%$ 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 Pome Fruits 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 declared quarantine suspension zones and a list of growers who remain in the area freedom districts surrounding an outbreak site.

Notwithstanding 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 receipt, 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 $1^{\circ}\text{C} \pm 0.6^{\circ}$ (or for avocado $1^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$) 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 receipt (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)”.

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.

Notwithstanding 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: Notwithstanding 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 reinstated.

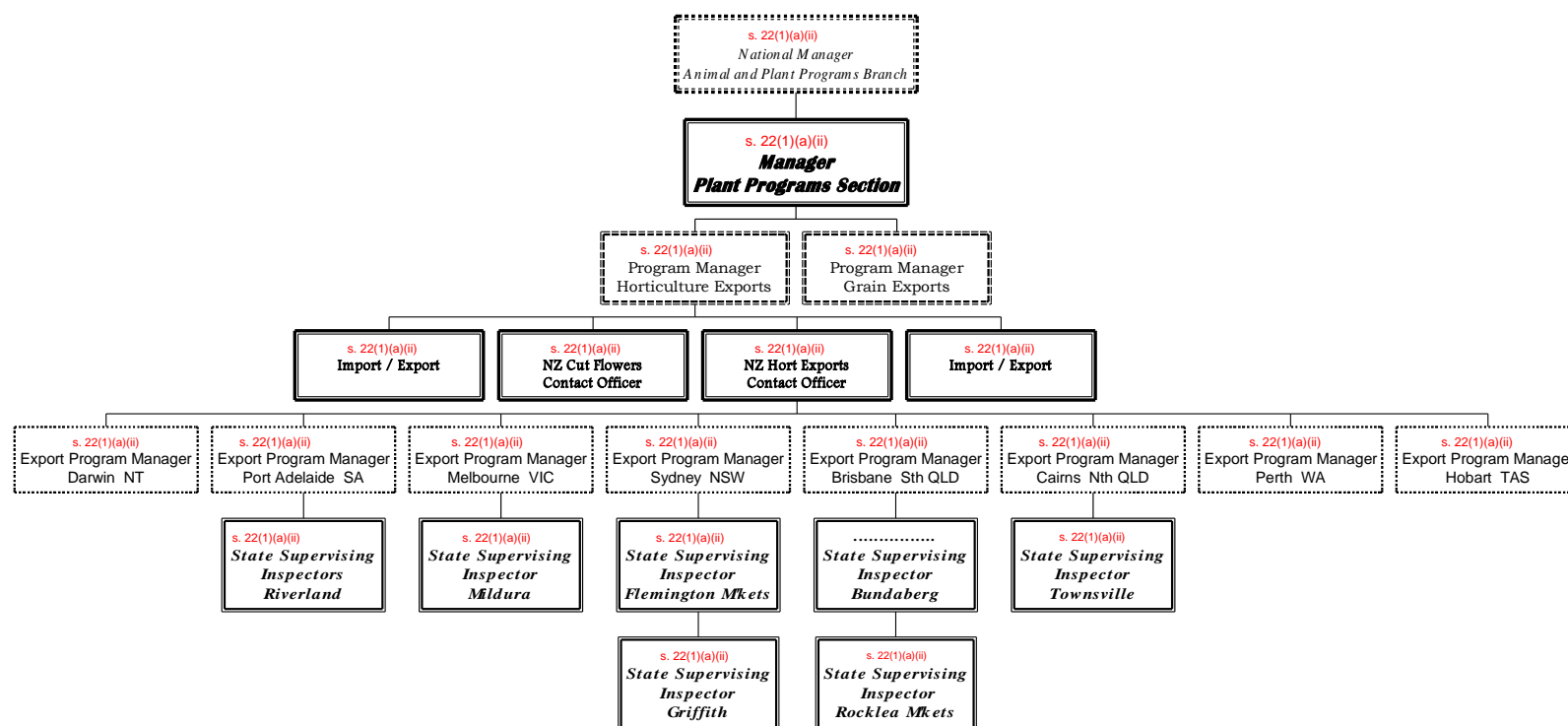
Copies of audit reports will be placed on relevant grower, packer and/or exporters files.

Results of audits will detail findings and be forwarded to 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 is 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.

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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 must be specifically registered for the New Zealand export trade in BQA/IHS commodities.

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. 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.

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 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 who are packing fruits/vegetables must be registered with AQIS for the purpose of preparing, packing and exporting to New Zealand.

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.

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.

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.

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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

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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.

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 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 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 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 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

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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 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 corrective action has been implemented and that systems are established to ensure that the nonconformance will not reoccur.

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

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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,

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- . 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 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 :

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- . 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

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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.

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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.

1.1 Avocado, *Persea americana***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
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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**

1.1 Avocado, *Persea americana*

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

1.1 Avocado, *Persea americana***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

1.1 Avocado, *Persea americana***Lymantriidae***Acyphas leucomelas**Euproctis lutea**Euproctis* sp.*Olene mendosa**Olene ostracina**Orgyia australis**Orgyia papuana***Noctuidae***Erygia apicalis***Papilionidae***Graphium eurypylus***Psychidae***Oiketicus elongatus***Pyalidae***Conogethes punctiferalis***Tortricidae***Cryptophlebia ombrodelta**Cryptoptila immersana**Epiphyas* spp. (except *E. postvittana*)*Homona spargotis**Isotenes miserana**Lobesia* sp.**Thysanoptera****Thripidae***Selenothrips rubrocinctus*

omnivorous tussock moth

Turkestan brown-tail

browntail moth

tussock moth

tussock moth

vapourer moth

painted pine moth

noctuid moth

palegreen triangle butterfly

Saunders' case moth

yellow peach moth

litchi fruit moth

ivy leafroller

leafrollers

avocado leafroller

orange fruitborer

European grape berry moth

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**

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1.1 Avocado, *Persea americana*

None

Regulated non plant pests/unwanted organisms

None

1.1 Avocado, *Persea americana***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*

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

1.2 Banana, *Musa* spp.**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	
<i>Bactrocera aquilonis</i>	fruit fly
<i>Bactrocera jarvisi</i>	Javis' fruit fly
<i>Bactrocera papayae</i>	papaya fruit fly
<i>Bactrocera tryoni</i>	Queensland fruit fly

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

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

Lepidoptera
Lymantriidae

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1.2 Banana, *Musa* spp.

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

Phyllachorales**Phyllachoraceae**

Phyllachora musicola -

Mitosporic Fungi (Coelomycetes)**Sphaeropsidales****Sphaerioidaceae**

Phomopsis musicola -

Mitosporic Fungi (Hyphomycetes)**Hyphomycetales****Dematiaceae**

Cercospora hayi -

Deightonella torulosa -

Moniliaceae

Verticillium theobromae -

Oomycota**Pythiales****Pythiaceae**

Phytophthora palmivora phytophthora fruit rot

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

1.2 Banana, *Musa* spp.**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 bicornis*

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 urticae

twospotted spider mite

1.2 Banana, *Musa* spp.

Fungus

Ascomycota

Microascales

Unknown Microascales

Ceratocystis paradoxa

(anamorph *Chalara paradoxa*)

Unknown Ascomycota

Magnaporthaceae

Magnaporthe grisea

(anamorph *Pyricularia grisea*)

Non-regulated non plant pests/organisms

None

1.3 Citrus, *Citrus* spp.**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	
<i>Bactrocera aquilonis</i>	fruit fly
<i>Bactrocera halfordiae</i>	fruit fly
<i>Bactrocera jarvisi</i>	Jarvis' fruit fly
<i>Bactrocera neohumeralis</i>	lesser Queensland fruit fly
<i>Bactrocera tryoni</i>	Queensland fruit fly
<i>Ceratitis capitata</i>	Mediterranean fruit fly

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

Pest Scientific Name	Common Name
Insecta	
Lepidoptera	
Gracillariidae	
<i>Phyllocnistis citrella</i>	citrus leafminer

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

1.3 Citrus, *Citrus* spp.

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

1.3 Citrus, *Citrus* spp.**Hemiptera****Coreidae***Amblypelta brevicornis*

fruit-spotting bug

Fabricea 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**

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1.3 Citrus, *Citrus* spp.

<i>Cosmopteryx schismatias</i>	leafminer
Geometridae	
<i>Lophodes sinistraria</i>	brown looper
Noctuidae	
<i>Eudocima fullonia</i>	fruit-piercing moth
<i>Eudocima materna</i>	fruit-sucking moth
<i>Eudocima salamina</i>	fruit-piercing moth
<i>Eudocima tyrannus</i>	fruit-piercing moth
<i>Ischja albata</i>	noctuid moth
<i>Lagoptera regia</i>	noctuid moth
<i>Mocis frugalis</i>	semi-looper caterpillar
<i>Othreis tyrannus</i>	fruit-sucking moth
<i>Parallelia palumba</i>	noctuid moth
<i>Tiracola plagiata</i>	banana fruit caterpillar
Papilionidae	
<i>Papilio aegeus</i>	large citrus butterfly
<i>Papilio anactus</i>	small citrus butterfly
Psychidae	
<i>Hyalarcta huebneri</i>	leaf case moth
<i>Oiketicus elongatus</i>	Saunders' case moth
Pyalidae	
<i>Conogethes punctiferalis</i>	yellow peach moth
<i>Cryptoblabes adoceta</i>	false blossom moth
<i>Cryptoblabes hemigypsa</i>	false blossom moth
Tortricidae	
<i>Adoxophyes templan</i>	leafroller
<i>Epiphyas</i> spp.	leafrollers
<i>Isotenes miserana</i>	orange fruitborer
Yponomeutidae	
<i>Prays parilis</i>	Citrus flower moth
Thysanoptera	
Phlaeothripidae	
<i>Haplothrips gowdeyi</i>	black flower thrips
<i>Haplothrips victoriensis</i>	tubular black thrips

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1.3 Citrus, *Citrus* spp.

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

1.3 Citrus, *Citrus* spp.**Non-regulated Pests (non-actionable)****Non-regulated non-quarantine pests**

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

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1.3 Citrus, *Citrus* spp.

Heliothrips haemorrhoidalis
Pseudanaphothrips achaetus
Thrips australis
Thrips imaginis
Thrips tabaci

greenhouse thrips
thrips
thrips
plague thrips
onion thrips

Mite

Arachnida

Acarina

Eriophyidae

Aceria sheldoni
Phyllocoptruta oleivora

citrus bud mite
citrus rust mite

Tarsonemidae

Polyphagotarsonemus latus

broad mite

Tenuipalpidae

Brevipalpus californicus
Brevipalpus phoenicis

bunch mite
passionvine mite

Tetranychidae

Panonychus citri
Tetranychus urticae

citrus red mite
twospotted spider mite

Fungus

Ascomycota

Dothideales

Botryosphaeriaceae

Guignardia citricarpa
(anamorph *Phyllosticta citricarpa*)

-

Non-regulated non plant pests/organisms

None

1.4 Grape, *Vitis vinifera***GRAPE***Vitis vinifera*

Grapes can be exported to New Zealand under Area Freedom 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	
<i>Bactrocera tryoni</i>	Queensland fruit fly
<i>Ceratitis capitata</i>	Mediterranean 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*)
Eragrostis curvula - African love grass
Lycium spp. (excepting *L. chinese* and *L. ferocissimum*)

Pennisetum alopecuroides - Chinese pennisetum
Pennisetum macrourum - African feather grass

1.4 Grape, *Vitis vinifera**Phragmites* spp.*Solanum elaeagnifolium* - Silver leaf nightshade*Sorghum × alnum* - Columbus grass*Sorghum halepense* - Johnson grass*Tribulus* 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 grandidata*

metallic flea beetle

Monolepta australis

red-shouldered leaf beetle

Monolepta divisa

small monolepta beetle

Curculionidae*Orthorhinus 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

Pyrrhocoridae*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

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1.4 Grape, *Vitis vinifera*

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

Mite

Arachnida

Acarina

Tenuipalpidae

<i>Brevipalpus lewisi</i>	bunch mite
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Tetranychidae

<i>Calepitrimerus vitis</i>	grapeleaf rust mite
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Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

Spider

Arachnida

Araneae

Theridiidae

<i>Lactrodectus hasselti</i>	Australian red-back spider
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1.4 Grape, *Vitis vinifera***Non-regulated Pests (non-actionable)****Non-regulated non-quarantine pests**

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

Non-regulated non plant pests/organisms

None

1.5 Mango, *Mangifera indica***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	
<i>Bactrocera jarvisi</i>	Jarvis' fruit fly
<i>Bactrocera neohumeralis</i>	lesser Queensland fruit fly
<i>Bactrocera tryoni</i>	Queensland fruit fly
<i>Ceratitidis capitata</i>	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	
<i>Ceroplastes rubens</i>	red wax scale
Diaspididae	
<i>Aspidiotus destructor</i>	coconut scale
<i>Aulacaspis tubercularis</i>	common mango scale
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Ischnaspis longirostris</i>	black thread scale
<i>Phenacaspis dilatata</i>	mango scale
Flatidae	
<i>Colgaroides acuminata</i>	mango planthopper

1.5 Mango, *Mangifera indica***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

1.5 Mango, *Mangifera indica***Non-regulated Pests (non-actionable)****Non-regulated non-quarantine pests**

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

Mite**Arachnida****Acarina****Tarsonemidae**

<i>Polyphagotarsonemus latus</i>	broad mite
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Non-regulated non plant pests/organisms

None

1.6 Papaya, *Carica papaya***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	
<i>Anastrepha suspensa</i>	Caribbean fruit fly
<i>Bactrocera cucurbitae</i>	melon fly
<i>Bactrocera neohumeralis</i>	lesser Queensland fruit fly
<i>Bactrocera tryoni</i>	Queensland fruit fly
<i>Ceratitis capitata</i>	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	
<i>Amblypelta lutescens</i>	fruit-spotting bug
Homoptera	
Cicadellidae	
<i>Orosius argentatus</i>	brown leafhopper
Diaspididae	
<i>Aonidiella orientalis</i>	oriental yellow scale
Lepidoptera	
Pyralidae	
<i>Conogethes punctiferalis</i>	yellow peach moth

1.6 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

1.6 Papaya, *Carica papaya***Non-regulated (non-actionable)****Non-regulated non-quarantine pests**

Pest Scientific Name	Common Name
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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

1.7 Pineapple, *Ananas comosus***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

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****Nitidulidae**

Brachypeplus basalis
Carpophilus marginellus
Carpophilus oculatus
Urophorus humeralis

dried fruit beetle
dried fruit beetle
dried fruit beetle
dried fruit beetle

Ptinidae

Mezium americanum

American spider beetle

1.7 Pineapple, *Ananas comosus***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

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1.7 Pineapple, *Ananas comosus*

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

1.7 Pineapple, *Ananas comosus***Non-regulated (non-actionable)****Non-regulated non-quarantine pests**

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

1.7 Pineapple, *Ananas comosus***Fungus****Ascomycota****Hypocreales****Hypocreaceae**

Gibberella fujikuroi ear rot
(anamorph *Fusarium fujikuroi*)

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

1.8 Pomegranate, *Punica granatum***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	
<i>Bactrocera jarvisi</i>	Jarvis' fruit fly
<i>Bactrocera tryoni</i>	Queensland fruit fly
<i>Ceratitis capitata</i>	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	
<i>Orthorhinus cylindrirostris</i>	elephant weevil

Hemiptera

1.8 Pomegranate, *Punica granatum***Lygaeidae***Oxycarenus arctatus*

coon bug

Homoptera**Aphididae***Aphis spiraecola*

spirea aphid

Lepidoptera**Pyralidae***Ectomyelois* sp.

carob moth

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

1.8 Pomegranate, *Punica granatum***Non-regulated Pests (non-actionable)****Non-regulated non-quarantine pests**

Pest Scientific Name	Common Name
Insecta	
Homoptera	
Aphididae	
<i>Aphis gossypii</i>	cotton aphid
<i>Aulacorthum circumflexum</i>	mottled arum aphid
<i>Myzus ornatus</i>	ornate aphid
<i>Myzus persicae</i>	green peach aphid
Mite	
Arachnida	
Acarina	
Tetranychidae	
<i>Tetranychus</i> spp.	spider mites

Non-regulated non plant pests/organisms

None

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

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1.9 Strawberry, *Fragaria* spp.

Epiphyas spp.

leafrollers

Isotenes miserana

orange fruitborer

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

1.9 Strawberry, *Fragaria* spp.**Non-regulated Pests (non-actionable)****Non-regulated non-quarantine pests**

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

1.9 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

1.10 Tomato, *Lycopersicon esculentum***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	
<i>Epilachna</i> sp.	leaf-eating ladybird
Curculionidae	
<i>Listroderes difficilis</i>	vegetable weevil
Tenebrionidae	
<i>Gonocephalum carpentariae</i>	false wireworm
Diptera	
Lonchaeidae	
<i>Lamprolonchaea brouniana</i>	metallic-green tomato fly
Muscidae	
<i>Antherigona orientalis</i>	muscid fly
Hemiptera	
Lygaeidae	
<i>Nysius vinitor</i>	Rutherglen bug
Pentatomidae	green stink bug
<i>Plautia affinis</i>	
Pyrrhocoridae	
<i>Dindymus versicolor</i>	harlequin bug
Rhopalidae	
<i>Leptocoris mitellatus</i>	leptocoris bug
Homoptera	
Cicadellidae	
<i>Austroasca viridigrisea</i>	vegetable leafhopper
Lepidoptera	
Noctuidae	
<i>Helicoverpa punctigera</i>	oriental tobacco budworm

Regulated non-quarantine pests

None

Regulated non plant pests/unwanted organisms

None

1.10 Tomato, *Lycopersicon esculentum***Non-regulated Pests (non-actionable)****Non-regulated non-quarantine pests**

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

Non-regulated non plant pests/organisms

None

2.1 Sunraysia district**APPENDIX 2 GENERATION TIMES – QUEENSLAND FRUIT FLY****QUEENSLAND FRUIT FLY GENERATION TIMES/DATES FOR THE SUNRAYSLIA 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

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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
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12 - Oct	02 - Dec	30 - Dec	06 - Jan	06 - Feb

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2.1 Sunraysia district

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
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01 - Dec	05 - Jan	02 - Feb	05 - Feb	09 - Mar
02 - Dec	06 - Jan	03 - Feb	06 - Feb	11 - Mar

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2.1 Sunraysia district

03 - Dec	06 - Jan	03 - Feb	06 - Feb	11 - 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

2.2 Riverland district**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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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

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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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03 - Apr	04 - Nov	02 - Dec	20 - Dec	23 - Jan
04 - Apr	06 - Nov	04 - Dec	21 - Dec	24 - Jan
05 - Apr	06 - Nov	04 - Dec	21 - Dec	24 - Jan

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2.2 Riverland district

06 - Apr	07 - Nov	05 - Dec	22 - Dec	25 - Jan
07 - Apr	08 - Nov	06 - Dec	22 - Dec	25 - Jan
08 - Apr	09 - Nov	07 - Dec	23 - Dec	26 - Jan
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13 - Apr	11 - Nov	09 - Dec	24 - Dec	27 - Jan
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30 - Apr	20 - Nov	18 - Dec	30 - Dec	03 - Feb
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2.2 Riverland district

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

17 - Jul	25 - Nov	23 - Dec	02 - Jan	05 - Feb
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06 - Sep	27 - Nov	25 - Dec	05 - Jan	08 - Feb
07 - Sep	27 - Nov	25 - Dec	05 - Jan	08 - Feb
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26 - Oct	13 - Dec	10 - Jan	18 - Jan	20 - Feb

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2.2 Riverland district

27 - Oct	14 - Dec	11 - Jan	19 - Jan	22 - Feb
28 - Oct	15 - Dec	12 - Jan	20 - Jan	23 - Feb
29 - Oct	15 - Dec	12 - Jan	20 - Jan	23 - Feb
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31 - Oct	16 - Dec	13 - Jan	20 - Jan	23 - Feb
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2.2 Riverland district

17 - Dec	20 - Jan	17 - Feb	23 - Feb	21 - Apr
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30 - Dec	01 - Feb	01 - Mar	08 - Mar	13 - Oct
31 - Dec	03 - Feb	03 - Mar	11 - Mar	19 - Oct

2.3 MIA**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
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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

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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
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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 3.1**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			
<p>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.</p> <p>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.</p> <p>I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.</p>			
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		
<p>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</p> <p>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.</p> <p>I acknowledge that failure to comply with the aforementioned conditions and restrictions may lead to suspension or cancellation of said registration.</p>		
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

Appendix 3.4**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				Remarks
			RG3	RG2	RG1	NQ	
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**

Appendix 3.5**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**Page 2 of 2****DECLARATION**

On(date) I, Department of
Health Licensed Fumigator Number.....
of fumigated the product described on EX 186
Numberwith 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.

Appendix 3.6**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 1⁰C +/- 0.6⁰C.....

All Sensors/probes were calibrated using the ice slurry method on(Date)

DATE	TIME	TEMPERATURE CHECKS					INITIALS
		Sensor	Sensor	Sensor	Sensor	Sensor	

Appendix 3.7**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)

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 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.....

AND2. 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 of19.....

Signature Witness

Appendix 3.10**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

Date

Senior Inspector/Supervising Inspector

Seal/Stamp

Appendix 3.12**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

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.....

LEX-33401



Australian Government
Department of Agriculture,
Fisheries and Forestry

2007/23634



25

AQIS

**PLANTS - HORTICULTURE - Systems Operational Manual - Australia -
New Zealand - Bilateral Quarantine Arrangement - 1994**

Date Registered	Date Closed	Archival Action	Top Numbered From
16/11/2007			

Former Papers On

EACH Officer is to enter their initial when
clearing the folio. SENDING Officer must not
initial their outward entry.

Later Papers On

Grace: FILE BARCODE
CBR2524919



5. Section 8 - Area Freedom - Fruit Flies - Leave this Section as is. It is expected that this entire Section will need to be rewritten to reflect the conditions and operating instructions contained in the Tri-State Code of Practice for the Management and Control of Fruit Flies and will be written at a later stage as a whole amended Section. This Section will eventually include maps which define the approved regions that New Zealand will accept as area free.
6. Section 9 - Post Treatment Security needs to be discussed with John Snell to encompass the requirements for the cucurbit and tomato trade ex Queensland. Carton integrity/security and movement of produce from country areas to freight forwarders/exporters are Johns' main concerns.
7. Section 11 - Contingencies - This needs to include a para on suspension of Australian area freedom status if fruit flies at any stage of life are detected during on-arrival inspection New Zealand from fruit sourced from proclaimed area free regions of Australia.
8. Section 13 - Other Procedures - Requirements - This Section should be combined with either the commodity sections or general export directions.
9. Section 14 - Phytosanitary Certification - Endorsements - This section needs to contain only the general requirements which are common to all commodities. Specific additional declarations should be listed under each commodity requirements.
10. Section 15 - For Watermelons (methyl bromide fumigation), rockmelons and zucchinis (dimethoate dipping), now have full approval as being recognised disinfestation treatments by New Zealand. These commodities need to be pulled out and given specific directions. For all other cucurbit commodities i.e. cucumber, honeydew melons, scallopini, pumpkin and squash, dimethoate dipping remains an interim approved treatment with rigorous grower registration, packinghouse documentation, inspection and security provisions as covered in Section 15 remaining in force.

NOTE We are expecting information from New Zealand of the fruit fly *Bactrocera cucumis* and this may give reclassifying some aspects a further alternative for industry. See B Tucker before tackling this section.

The document must have headers and footers and page numbering systems and be fully indexed. Some recent amendments have not included this information again making cross referencing difficult.

In general terms the conditions and requirements that are presently covered within the existing SOM are correct and must remain in place however, its the presentation of the information that needs to be reformatted. Much of the work is cutting and pasting with appropriate referencing throughout although some new work in some sections is required.

-
- 5.3.6. Dipping Treatments - Dimethoate
 - 5.4. Certification Assurance Arrangements for Fumigation/Cold Storage
 - 5.5. Post Treatment Security
 - 5.6. Treatment Endorsements - Phytosanitary Certificates

 - 6. Quality Systems for New Zealand Produce Component Responsibilities**
 - 6.1. Prelude to Quality Systems**
 - 6.1.1. Growers Checklist
 - 6.1.2. Packinghouse Checklist
 - 6.1.3. Treatment Centres Checklist
 - 6.1.4. Exporters Checklist
 - 6.2. Quality Systems and Component Responsibilities**
 - 6.2.1. Grower Registration
 - 6.2.2. Recommended Pest Control Programs
 - 6.2.3. Pest Control/Monitoring Diaries
 - 6.3. Crop Monitoring
 - 6.4.1. Packinghouse Responsibilities - Registration
 - 6.4.2. Grower Identification
 - 6.4.3. Grower 'End Point' Inspection
 - 6.5.1. Operation Requirements
 - 6.5.2. Operational Hygiene
 - 6.6.1. Inspection Requirements
 - 6.6.2. Inspection Requirements CA Packinghouses
 - 6.6.3. Inspection Requirements Non-CA Packinghouses
 - 6.7. Isolation of Rejected Produce all Packinghouses
 - 6.8. Rules for Failure - Packinghouses
 - 6.9.1. Requirements for Exporters
 - 6.9.2. Exporter Inspection
 - 6.9.3. Exporter Delegation of Inspection
 - 6.10. Isolation Procedures for Rejected Produce
 - 6.11. Rules for Failure - Exporters
 - 6.12.1. AQIS Inspection Procedures
 - 6.12.2. Method of Drawing Samples
 - 6.12.3. Grower Line Lots
 - 6.12.4. Rejection Procedures

 - 7. Auditing Requirements- Growers - Packers - Treatment Centres - Exporters**
 - 7.1. Grower Audits by CA Packinghouses
 - 7.2. Grower Audits AQIS Responsibilities
 - 7.3. Grower Audits - Frequency
 - 7.4.1. Grower Audits - Non-compliance
 - 7.4.2. Grower Audits - Suspension/Withdrawal
 - 7.5. Packinghouse Audit of Operations
 - 7.6. Audits following Rejections
 - 7.7. Treatment Centre Audits
 - 7.8. Exporter Audits
 - 7.9. Summary of Audit Responsibilities Frequency etc.
-

-
- 15.6. MAF Inspection on Arrival
15.7 Phytosanitary Certification Endorsements for Cucurbits

-
- 8. **Area Freedom - Fruit Flies**
 - 8.1. Validation of Area Freedom
 - 8.2. Outbreak within Area Freedom
 - 8.3. Trapping

 - 9. **Post treatment Security**
 - 9.1.1. At Treatment Centre
 - 9.1.2. At Exporters Premises
 - 9.2. Security at Exporters/Freight Forwarders Premises

 - 10. **Certification Assurance Programmes**

 - 11. **Contingencies**
 - 11.1. Procedures on Detection of Critical Pests in New Zealand
 - 11.2. Interceptions by AQIS
 - 11.3. Interceptions by Packinghouse

 - 12. **Forms and Record Sheets**

 - 13. **Other required Procedures**
 - 13.1 Avocado - Sun Blotch Viroid
 - 13.2 Split Consignment Inspection and Records Required
 - 13.3 Movement of Untreated Consignments

 - 14. **Phytosanitary Certification and Endorsements**
 - 14.1.1. Phytosanitary Certification
 - 14.1.2. Commodities Covered
 - 14.2.1. Grower Line (Single) Consignments
 - 14.2.2. Mixed Grower Line Consignments
 - 14.3. General Endorsement
 - 14.4. Additional Declarations/Endorsements

 - 15. **Cucurbit Exports under "Interim Approval Treatment" - Dimethoate**
 - 15.1.1. Grower Registration Requirements
 - 15.1.2. Grower Monitoring and Spray Diaries
 - 15.2.1. Packinghouse Packing Records
 - 15.2.2. Approved Interim Treatment - Dimethoate Dipping
 - 15.2.3. Approved Interim Treatment - Methyl Bromide Fumigation - Watermelon
 - 15.3. Product Security
 - 15.3.1 Ventilated Cartons
 - 15.3.2 Unventilated Cartons
 - 15.3.3 Open Topped Boxes - Dimethoate Dipped After Packing or Pre-sizing
 - 15.4.1. Exporter - Exporter Delegate Inspection
 - 15.4.2 AQIS Inspection
 - 15.5.1. Audit Requirements - Growers
 - 15.5.2. Audit Requirements - Packinghouses
 - 15.5.3. Audit Requirements - Treatment Centres
-

- 6. Quality Systems for New Zealand Produce Component Responsibilities**
 - 6.1. Prelude to Quality Systems**
 - 6.1.1. Growers Checklist
 - 6.1.2. Packinghouse Checklist
 - 6.1.3. Treatment Centres Checklist
 - 6.1.4. Exporters Checklist
 - 6.2 Quality Systems and Component Responsibilities**
 - 6.2.1. Grower Registration
 - 6.2.2. Recommended Pest Control Programs
 - 6.2.3. Pest Control/Monitoring Diaries
 - 6.3. Crop Monitoring
 - 6.4.1. Packinghouse Responsibilities - Registration
 - 6.4.2. Grower Identification
 - 6.4.3. Grower 'End Point' Inspection
 - 6.5.1. Operation Requirements
 - 6.5.2. Operational Hygiene
 - 6.6.1. Inspection Requirements
 - 6.6.2. Inspection Requirements CA Packinghouses
 - 6.6.3. Inspection Requirements Non-CA Packinghouses
 - 6.7. Isolation of Rejected Produce all Packinghouses
 - 6.8. Rules for Failure - Packinghouses
 - 6.9.1. Requirements for Exporters
 - 6.9.2. Exporter Inspection
 - 6.9.3. Exporter Delegation of Inspection
 - 6.10. Isolation Procedures for Rejected Produce
 - 6.11. Rules for Failure - Exporters
 - 6.12.1. AQIS Inspection Procedures
 - 6.12.2. Method of Drawing Samples
 - 6.12.3. Grower Line Lots
 - 6.12.4. Rejection Procedures
- 7. Auditing Requirements- Growers - Packers - Treatment Centres - Exporters**
 - 7.1. Grower Audits by CA Packinghouses
 - 7.2. Grower Audits AQIS Responsibilities
 - 7.3. Grower Audits - Frequency
 - 7.4.1. Grower Audits - Non-compliance
 - 7.4.2. Grower Audits - Suspension/Withdrawal
 - 7.5. Packinghouse Audit of Operations
 - 7.6. Audits following Rejections
 - 7.7. Treatment Centre Audits
 - 7.8. Exporter Audits
 - 7.9. Summary of Audit Responsibilities Frequency etc.
- 8. Area Freedom - Fruit Flies**
 - 8.1. Validation of Area Freedom
 - 8.2. Outbreak within Area Freedom
 - 8.3. Trapping

- 9. Post treatment Security**
 - 9.1.1. At Treatment Centre
 - 9.1.2. At Exporters Premises
 - 9.2. Security at Exporters/Freight Forwarders Premises
- 10. Certification Assurance Programmes**
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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. 47F(1)	
2		10/5/94
3		31/5/94
4		15/6/94
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MANUAL: SYSTEMS OPERATIONS MANUAL

AMENDMENT NUMBER : 3

DATE ISSUED: 19 May 1994

- Note:**
- (1) All changes to text are indicated by a vertical line in the margin of each page.
 - (2) Note all changes and update "Amendment Record" of the Manual accordingly.

SECTION/PAGE	INSTRUCTIONS
Contents	Replace Pages i to iv
Appendices	Replace Page v
Distribution - Controlled Copies	Replace Pages vi and vii
Definitions	Replace Pages x and xi
Section 1	Replace Pages 2 and 3
Section 2	Replace Pages 1 to 6 with Pages 1 to 29. - Pest Lists are now commodity specific
Section 4	Replace Pages 3 and 4
Section 5	Replace Pages 1 to 8 with Pages 1 to 11. - Commodities and treatments have been revised following the effective withdrawal of EDB fumigation treatments.
Section 6.1.1.	Replace Page 1 with Pages 1 and 2
Section 6.1.3.	Replace Pages 5 and 6
Section 6.2. to Section 6.12.4.	Replace all Pages with pages 9 to 24

Section 7	Replace Pages 1 to 5 and page 7
Section 8.	Replace Page 1
Section 8.	Replace Pages 3 to 5 with Pages 3 to 26 - Fruit fly generation times are now date specific for each declared area.
Section 9.	Replace Page 1
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Section 11.	Replace Pages 1 and 2
Section 13.	Replace Pages 1 and 2 with Pages 1 to 3
Section 14.	Replace Pages 2 and 3
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Appendix 5.	Replace Page 1
Appendix 7.	Replace Pages 1
Appendix 8.	Replace Pages 1 and 2
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Appendix 11.	Replace Page 1
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Appendix 14.	Replace Pages 1 and 2
Appendix 15.	Replace Page 1
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Dept of Agriculture W. Aust Attn s. 47F(1)	PO Box 1410 Canning Vale 6155	14 & 15	✓
Dept of Agriculture W. Aust State Contact Officer (C/A) Attn s. 47F(1)	PO Box 1410 Canning Vale 6155	16	✓

Dept of Agriculture N.T. Attn s. 47F(1)	PO Box 2268 Darwin 0801	17 ✓
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Ministry of Agriculture and Fisheries Attn s. 47F(1)	PO Box 2526 Wellington New Zealand	19
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Glossary of Terms

AQIS	- Australian Quarantine and Inspection Service
BQA	- Bilateral Quarantine Agreement
CA	- Certification Assurance
DPI+E	- Department of Primary Industries and Energy
EDB	- Ethylene Dibromide
EC (FF+V) O'S	- Export Control (Fresh Fruit and Vegetable) Orders
ISO	- International Standards Organisation
MAF	- Ministry of Agriculture and Fisheries (New Zealand)
MB	- Methyl Bromide
MPL	- Maximum Pest Limit
PQIB	- Plant Quarantine and Inspection Branch
QC	- Quality Control
SBV	- Sun Blotch Viroid (Avocado)
SSO	- State Supervising Officer (Exports)
SI	- Senior Inspector (Exports)

Definitions

AQIS Inspection Lots	An inspection lot is any number of packages from one grower/packer/exporter of the same BQA commodity presented for inspection at one time. This includes lines presented for inspection that will be subsequently split into separate consignments for export to several destinations in New Zealand.
Critical Quarantine Pest	Members of the fruit fly species (family Tephritidae)
Crop	All types of produce produced under the one species of plant are to be considered as one crop as listed in Section 5.1. of this Manual.(i.e. honeydew melons and zucchini are one crop under the cucurbit group of plants).
Defect	Any unit of produce that is infested with critical and/or quarantine pests.
End Point Inspection	Product inspection carried out by an AQIS Inspector on an individual grower line basis. Lines are rejected/accepted for export based on this inspection.
Grower line (or lot)	A single crop produced by one registered grower and intended for export to New Zealand.
Grower Line Consignments	Each consignment will consist of only one BQA crop and from one grower.
Homogeneous	An identifiable lot of produce which has been produced in accordance with one of the pathways defined in Section 3, resulting in uniformity of pest contamination.
In Line Inspection	A process where a packinghouse has defined a sampling and inspection method, that meets the appropriate sampling plan, over a period of time during the packing process.
Interim Approval	Approval for a 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 in the defined area to meet New Zealand's area freedom specification.
Pathway	A documented series of activities that, when carried out according to approved procedures, form a discrete and traceable export system.
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 BQA and appropriately endorsed.
Quarantine Pest	A pest of potential national importance to the country endangered thereby and not yet present there, or present but not widely distributed and being actively controlled.
Secure Package	Any approved method that will minimize the risk of cross contamination, 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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**AUSTRALIA-NEW ZEALAND - BILATERAL QUARANTINE
ARRANGEMENT****SYSTEMS OPERATIONAL MANUAL****Summary of contents**

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- Amendment record summary
- Glossary of terms and abbreviations
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 - 1.3 Maximum Pest Limits (MPL's)
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- 2.2. Pest Lists - Non-quarantine Pests**
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- 4. Management Responsibilities**
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1. INTRODUCTION - OPERATIONAL MANUAL

The purpose of this Manual is to detail operational procedures for AQIS inspectors and industry participants who have direct responsibilities to ensure the conditions of the BQA are met.

This Manual defines and interprets the minimum requirements of the Bilateral Quarantine Arrangement and provides direction and procedures for those aspects for which AQIS have overriding responsibility.

It is important to note that BQA programmes are quarantine rather than quality based. For this reason the emphasis of this Manual is directed towards proper hygiene, good management, inspection, treatment, security and documentation to provide a level of assurance that allows meaningful certification to the requirements of the Ministry of Agriculture and Fisheries (MAF) New Zealand.

Some components of this Manual are over and above the requirements of the Australian - New Zealand BQA however, AQIS in conjunction with industry have agreed that implementation of these requirements are important for the overall integrity of phytosanitary certification.

1.1. Scope of the Manual

This Operational Manual is designed to ensure:

- **homogeneity of produce consignments**
- **approved treatments for the produce are used**
- **required levels and intensity for inspection of the produce are maintained**
- **security to eliminate cross infestation and contamination and potential substitution of legitimate export produce.**
- **records to traceback to grower level.**

To ensure the responsibilities of the BQA systems are being properly performed, AQIS will audit the various components of it, on a regular and formal basis.

This Manual gives instructions for audit procedures and maintenance of records which will be the responsibility of State Departments of Agriculture to implement and to take required corrective actions non-conformities or advisory findings are identified. The entire system will be subject to random audits by the Canberra Office.

The checklists that are introduced as a Prelude to Section 6 of this Manual, must be used by each of the individual components of the system so as management can quickly assess the criteria which must be in place to meet the requirements of the BQA.

The checklists will also be useful for AQIS management and inspection staff for quickly assessing a components ability to meet and consistently perform, to the standards that are required of the industry in meeting our BQA obligations with New Zealand.

The checklists will also provide a useful management tool for State Departments in supervising and auditing the various pathways making up the Quality System.

All BQA arrangements will be audited by NZ MAF at frequent intervals. The purpose of such audits will be to establish that the terms and conditions of the BQA are being met via the procedures agreed to and documented in this Manual.

The BQA is a document that contains the basic requirements that must be built into an auditable system to give NZ MAF confidence in our certification for meeting NZ's standards for critical quarantine pests.

1.2.1. Critical Quarantine Pests (New Zealand Requirement - Mandatory) CATEGORY 'A'

Tephritidae - Fruit flies

Australia and New Zealand agree to the crops and the required inspection and treatment systems that ensure that New Zealand's MPL for fruit fly is not exceeded.

1.2.2. Quarantine Pests, Diseases and Weed Seeds- For Phytosanitary Certification CATEGORY 'B'

See Section 2 of this Manual for full details. Pest Lists are commodity specific.

Australia and New Zealand agree to what are determined to be quarantine pests, diseases and weed seeds. Australia must implement a system which will ensure that New Zealand's MPL for quarantine pests, diseases and weed seeds are not exceeded.

Homogeneity for quarantine pests will be achieved using the procedures in this Manual.

NOTE: Whilst weed seed contamination is a known problem for the crops table grapes, cucurbits and capsicums it needs to be monitored in other crops also.

1.2.3. Injurious Pests CATEGORY 'C' - Contaminants CATEGORY 'C' Non - actionable

Section 2 of this Manual lists the pests by commodity that AQIS have determined to be injurious and contaminants however, inspection and rejection for these pests is not required. The pests lists for this category are attached by commodity for reference by industry and inspection staff.

1. INTRODUCTION - OPERATIONAL MANUAL

The purpose of this Manual is to give operational procedures to AQIS inspectors and industry participants who have direct responsibilities to ensure the conditions of the BQA are met.

This Manual defines and interprets the minimum requirements of the Bilateral Quarantine Agreement and provides direction and procedures for those aspects for which AQIS have overriding responsibility.

It is important to note that BQA programmes are quarantine rather than quality based. For this reason the emphasis of this Manual is directed towards proper hygiene, good management, inspection, treatment, security and documentation to provide a level of assurance that allows meaningful certification to the requirements of the Ministry of Agriculture and Fisheries (MAF) New Zealand.

Some components of this Manual are over and above the requirements of the Australian - New Zealand BQA however, AQIS considers their implementation important for the overall integrity of phytosanitary certification.

1.1. Scope of the Manual

This Operational Manual is designed to ensure:

- homogeneity of produce consignments**
- approved treatments for the produce are used**
- required levels and intensity for inspection of the produce are maintained**
- security to eliminate cross infestation and contamination and potential substitution of legitimate export produce.**
- records to traceback to grower level.**

To ensure the responsibilities of the BQA systems are being properly performed, AQIS will audit the various components of it, on a regular and formal basis.

This Manual gives instructions for audit procedures and maintenance of records which will be the responsibility of State Headquarters Office to implement and take required corrective actions when they are identified. The entire system will be subject to random audits by Central Office.

The checklists that are introduced as a Prelude to Section 6 of this Manual, must be used by each of the individual components of the system so as management can quickly assess the criteria which must be in place to meet the requirements of the BQA.

The checklists will also be useful for AQIS management and inspection staff for quickly assessing a components ability to meet and consistently perform, to the standards that are required of the industry in meeting our BQA obligations with New Zealand.

The checklists will also provide a useful management tool for State Departments in supervising and auditing the various pathways making up the Quality System.

The checklists will also be useful for AQIS management and inspection staff for quickly assessing a components ability to meet and consistently perform, to the standards that are required of the industry in meeting our BQA obligations with New Zealand.

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1.2.2. Quarantine Pests and Weed Seeds- For Phytosanitary Certification CATEGORY 'B'

See Section 2 of this Manual for full details. Pest Lists are commodity specific.

Australia and New Zealand agree to what are determined to be quarantine pests, diseases and weed seeds to which Australia must implement a system which will ensure that New Zealand's MPL for quarantine pests, diseases and weed seeds are not exceeded.

Homogeneity for quarantine pests will be achieved using the procedures in this Manual.

NOTE: Whilst weed seed contamination is a known problem for the crops table grapes, cucurbits and capsicums it needs to be monitored in other crops also.

1.2.3. Injurious Pests CATEGORY 'C' - Contaminants CATEGORY 'C' Non - actionable

Section 2 of this Manual lists the pests by commodity that AQIS have determined to be injurious and contaminants however, inspection and rejection for these pests is not required. The pests lists for this category are attached by commodity for reference by industry and inspection staff.

1.3. MAXIMUM PEST LIMITS (MPL's)

1.3.1. Category A - Critical Quarantine Pests

MPL : 5 pests per million units

Tephritidae : Fruit flies

See Table 1 for inspection tolerances.

1.3.2. Category B - Quarantine Pests

MPL : 0.5%

Each commodity has its own list of both pests and weed seeds which are determined as quarantine pests.

See Section 2 of this Manual for details of quarantine pests.

See Table 1 for inspection tolerances.

1.3.3. Category C - Injurious Pests/Contaminants - Non-quarantine organisms

Inspection tolerance is not required. No rejections will be made for detections of these pests. Section 2 of this Manual gives details of pests that are regarded as injurious for each commodity.

TABLE 1
MAXIMUM PEST LIMITS
INSPECTION TOLERANCE TABLE

Pest Category	450 Samples	600 Samples	950 Samples	1250 Samples
Category A	Nil	Nil	Nil	Nil
Category B	Nil	Nil	less than 2 units	less than 3 units
Category C	Tolerance unlimited	Tolerance unlimited	Tolerance unlimited	Tolerance unlimited
Category D	Tolerance unlimited	Tolerance unlimited	Tolerance unlimited	Tolerance unlimited

NOTE: 1 The inspection tolerance table ensures a 95% confidence that the given MPL will not be exceeded for any category.

NOTE: 2 A 450 unit sample will only be inspected where the line is less than 1000 units.

NOTE: 3 The sample size must be nominated by the exporter or the exporter delegate prior to any inspection being undertaken. Once sample number has been selected it cannot be varied and must be used for all inspections covering that line/consignment.

If a pest is found during the inspection of produce for the BQA programme that cannot be readily identified, it must be assigned to Category B until it is identified and the category becomes known, appropriate action will then be taken.

All BQA arrangements will be audited by NZ MAF at frequent intervals. The purpose of such audits will be to establish that the terms and conditions of the BQA are being met via the procedures agreed to and documented in this Manual.

The BQA is a document that contains the basic requirements that must be built into an auditable system to give NZ MAF confidence in our certification for meeting NZ's standards for critical quarantine pests.

1.2.1. Critical Quarantine Pests (New Zealand Requirement - Mandatory) CATEGORY 'A'

Tephritidae - Fruit flies

Australia and New Zealand agree to the crops and the required inspection and treatment systems that ensure that New Zealand's MPL for fruit fly is not exceeded.

1.2.2. Quarantine Pests and Weed Seeds- For Phytosanitary Certification CATEGORY 'B'

See Section 2 of this Manual for full details.

Australia and New Zealand agree to what are determined to be Quarantine pests, diseases and weed seeds to which Australia must implement a system which will ensure that New Zealand's MPL for quarantine pests, diseases and weed seeds are not exceeded.

Homogeneity for quarantine pests will be achieved using the procedures in this Manual.

NOTE: Whilst weed seed contamination is a known problem for the crops table grapes, cucurbits and capsicums it needs to be monitored in other crops also.

1.2.3. Injurious Pests CATEGORY 'C' - Contaminants CATEGORY 'D'

Section 2 of this Manual lists the pests that AQIS have determined to be injurious and contaminants however inspection and rejection for these pests is not required. The pests lists for these two categories are attached for reference by industry and inspection staff.



1.3. MAXIMUM PEST LIMITS (MPL's)

1.3.1. Category A - Critical Quarantine Pests

MPL : 5 pests per million units

Tephritidae : Fruit flies

See Table 1 for inspection tolerances.

1.3.2. Category B - Quarantine Pests

MPL : 0.5%

Each commodity has its own list of both pests and weed seeds which are determined as quarantine pests.

See Section 2 of this Manual for details of quarantine pests.

See Table 1 for inspection tolerances.

1.3.3. Category C - Injurious Pests Non-quarantine pests

Inspection tolerance is not required. No rejections will be made for detections of these pests. Section 2 of this Manual gives details of pests that are regarded as injurious.

1.3.4. Category D - Contaminants Non-quarantine pests

Inspection tolerance is not required. No rejections will be made for detections of these pests. Section 2 of this Manual gives details of those pests that are regarded as contaminants.

TABLE 1
MAXIMUM PEST LIMITS
INSPECTION TOLERANCE TABLE

Pest Category	450 Samples	600 Samples	950 Samples	1250 Samples
Category A	Nil	Nil	Nil	Nil
Category B	Nil	Nil	less than 2 units	less than 3 units
Category C	Tolerance unlimited	Tolerance unlimited	Tolerance unlimited	Tolerance unlimited
Category D	Tolerance unlimited	Tolerance unlimited	Tolerance unlimited	Tolerance unlimited

NOTE: 1 The inspection tolerance table ensures a 95% confidence that the given MPL will not be exceeded for any category.

NOTE: 2 A 450 unit sample will only be inspected where the line is less than 1000 units.

NOTE: 3 The sample size must be nominated by the exporter or the exporter delegate prior to any inspection being undertaken. Once sample number has been selected it cannot be varied and must be used for all inspections covering that line/consignment.

If a pest is found during the inspection of produce for the BQA programme that cannot be readily identified, it must be assigned to Category B until it is identified and the category becomes known, appropriate action will then be taken.

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2.1.

PEST LISTS - BY COMMODITY

**QUARANTINE PESTS, DISEASES AND WEED SEEDS
AND INJURIOUS (NON - ACTIONABLE) PESTS**

The pests in the following lists (including diseases and weed seeds), will require action (e.g. fumigation, sorting, reshipment, destruction) if they exceed the MPL during on arrival inspection in New Zealand.

For a Category B listing, to obtain a confidence level of 95% that the MPL of 0.5% will not be exceeded, this means in a:

450 unit sample	- Nil units with live infestation
600 " " "	- " " " " "
950 " "	- less than 2 live infested units
1250 " "	- less than 3 live infested units

NOTES

Citrus Red Scale

Research has established that the waxing and hot air drying of citrus fruits infested with citrus red scale effectively kills the scale. Whilst at the time of inspection it will be difficult to determine if the scale is alive or dead, inspectors can assume that 95% of scale observed during inspection will be dead if the fruit has been subjected to the waxing and drying processes.

Sun Blotch Viroid

Sun Blotch Viroid (Avocado) will be controlled within the industry and the ANVAS tree Registration Scheme. Growers who are part of this scheme are the only growers who will be permitted access to the New Zealand market and these growers must identify and keep segregated, registered fruits from all other fruits whilst the fruit is being packed, stored and transported.

AUSTRALIA - NEW ZEALAND BQA

PEST LIST - EGGPLANT (*Solanum melongena*)

MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera tryoni Queensland Fruit Fly

B. MPL - 0.5% = Nil infested fruits in a 600 unit sample

<i>Agrotis spp</i>	Cutworms
<i>Aonidiella orientalis</i>	Oriental scale
<i>Aphis craccivora</i>	Cow pea aphid
<i>Aphis fabae</i>	Bean aphid
<i>Aphis gossypii</i>	Cotton aphid
<i>Argyrogramma signata</i>	Noctuid moth
<i>Atherigona orientalis</i>	Muscid fly
<i>Aulacorthum solani</i>	Foxglove aphid
<i>Austroasca viridigrisea</i>	Vegetable leafhopper
<i>Bemisia tabaci</i>	Tobacco whitefly
<i>Chrysodeixis spp.</i>	Loopers
<i>Conogethes punctiferalis</i>	Yellow peach moth
<i>Dindymus versicolor</i>	Harlequin bug
<i>Drosiphila spp.</i>	Ferment flies
<i>Epilachna vigintioctopunctata</i>	Leaf-eating ladybird
<i>Gryllotalpa spp.</i>	Mole crickets
<i>Heliothis assulta</i>	Cape gooseberry budworm
<i>Lamprolonchaea brouniana</i>	Metallic green tomato fly
<i>Leptocoris mitellatus</i>	Leptocoris bug
<i>Leptocrisa acuta</i>	Rice bug
<i>Macrosiphum euphorbiae</i>	Potato aphid
<i>Myzus persicae</i>	Green peach aphid
<i>Nysius vinitor</i>	Rutherglen bug
<i>Phaulacridium vittatum</i>	Wingless grasshopper
<i>Phenacoccus parvus</i>	Mealybug
<i>Phthorimaea operculella</i>	Potato moth
<i>Plautia affinis</i>	Green stink bug
<i>Plusia spp</i>	Semiloopers
<i>Scorbidipalpa heliopa</i>	Eggplant budworm
<i>Tetranychus desertorum</i>	Desert spider mite

2.1.

PEST LISTS - BY COMMODITY**QUARANTINE PESTS AND WEED SEEDS****AND INJURIOUS (NON - ACTIONABLE) PESTS**

The following pests (including weed seeds) will require action (e.g. fumigation, sorting, reshipment, destruction) if they exceed the MPL during on arrival inspection in New Zealand. To obtain a confidence level of 95% that the MPL of 0.5% will not be exceeded, this means in a:

450 unit sample	- Nil units with live infestation
600 " " "	- " " " " "
950 " "	- less than 2 live infested fruits
1250 " "	- less than 3 live infested fruits

NOTES**Citrus Red Scale**

Research has established that the waxing and hot air drying of citrus fruits infested with citrus red scale, that this process effectively kills the scale. Whilst at the time of inspection it will be difficult to determine if the scale is alive or dead, inspectors can assume that 95% of scale observed during inspection will be dead if the fruit has been subjected to the waxing and drying processes.

Sun Blotch Viroid

Sun Blotch Viroid (Avocado) will be controlled within the industry and the ANVAS tree Registration Scheme. Growers who are part of this scheme are the only growers who will be permitted access to the New Zealand market and these growers must identify and keep segregated, registered fruits from all other fruits whilst the fruit is being packed, stored and transported.

AUSTRALIA - NEW ZEALAND BQA PEST LIST - AVOCADO *persea*

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three (3) categories A through C below:

A. MPL = 5 pests per million units

Bactrocera aquilonis (fruit fly)

Bactrocera neohumeralis (fruit fly)

Bactrocera tryoni (Queensland fruit fly)

Ceratitis capitata (Mediterranean fruit fly)

B. MPL = 0.5%, = Nil in a 600 unit sample

Abgrallaspis cyanophylli (cyanophyllum scale)

Acyphas leucomelas (tussock moth)

Aleurocanthus spiniferus (spiny whitefly)

Amblypelta lutescens (Banana spotting bug)

Amblypelta nitida (fruit spotting bug)

Anoplognathus punctulatus (scarab beetle)

Aphididae (aphids)

Aulacophora hilaris (pumpkin beetle)

Camponotus spp (carpenter ants)

Ceroplastes ceriferus (Indian white wax scale)

Ceroplastes rubens (pink wax scale)

Chrysomphalus aonidum (circular black scale)

Chrysomphalus dictyospermi (Spanish red scale)

Cleora inflexaria (grey looper)

Cleora repedita (looper)

Cogonehtes punctiferalis (pyralid moth)

Cryptophlebia ombrodelta (macadamia nut borer)

Cryptoptila immersana (ivy leafroller)

Dasynus fuscescens (fruit spotting bug)

Diphucephala spp. (scarab beetles)

Dirioxa pornia (Island fruit fly)

Ectropis camelaria (ectropis looper)

Epiphyas spp. (leafrollers)

Erygia apicalis (noctuid moth)

Eucyclodes pieroides (bizarre looper)

Euproctis sp. (browntail moth)

Fiorinia fioriniae (fiorinia scale)

Graphium eurypylus (palegreen triangle butterfly)

Gymnoscelis lohopus (looper)

Helopeltis sp. (mirid)

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Avocado quarantine pests continued

Homona spargotis (avocado leafroller)
Isacantha rhinotoides (belid beetle)
Isotenes miserana (orange fruit borer)
Lagria cyanea (honey brown beetle)
Leptopius tetrapsodes (fruit tree root weevil)
Leptopius tuberculatus (fruit tree root weevil)
Lobesia sp. (leafroller)
Lophodes sinistraria (looper caterpillar)
Mesolita lineolata (longhorn beetle)
Mictis caja (fruit spotting bug)
Monolepta australis (monolepta beetle)
Myrmecia spp. (bulldog ants)
Neomerimnetes flindersiae (weevil)
Nysius clevelandensis (grey cluster bug)
Nysius vinitor (Rutherglen bug)
Oiketicus elongatus (Saunders' case moth)
Olene mendosa (tussock moth)
Olene ostracina (tussock moth)
Oligonychus coffeae (tea red spider mite)
Orgyia australis (tussock moth)
Orgyia papuana (painted pine moth)
Oxycarenum arctatus (coon bug)
Oxycarenum luctuosus (Cottonseed bug)
Paleticus sp. (avocado bark beetle)
Plautia affinis (green stink bug)
Poneridia australis (fig beetle)
Porthesia lutea (tussock moth)
Prosopius torosa (long horn beetle)
Protaetia fusca (flower beetle)
Rhyparida spp. (leaf beetles)
Selenothrips rubrocinctus (red banded thrip)
Siphanta galeata (planthopper)
Sternocorynus sp. (weevil)

Diseases

Cercospora purpurea (cercospora spot blotch)
Phomopsis perseae (fruit rot)
 Sunblotch viroid

Seeds

Baccharis halimifolia
Cenchrus spp (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)
Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)

Avocado quarantine pest and weed seed lists continued

Phragmites spp.

Solanum elaeagnifolium (silverleaf nightshade)

Sorghum x aluum (Columbus grass)

Sorghum halapense (Johnson grass)

Tribulus spp (caltrop)

Xanthium spp (except *X. spinosum*) (burr)

C. Soil Contamination: MPL = 25 gram per 600 unit sample

1.2. Non - Quarantine Organisms

Aspidiotus nerii (oleander scale)

Asynonychus cervinus (Fullers' rose weevil)

Botryodiplodia theobromae (fruit rot)

Botryosphaeria ribis (fruit blotch)

Botrytis cinerea (fruit rot)

Ceroplastes destructor (white wax scale)

Coccus longulus (long soft scale)

Colletotrichum acutatum (fruit rot/anthracnose)

Colletotrichum gloeosporioides (fruit rot/anthracnose)

Eotetranychus sexmaculatus (six spotted mite)

Heliothrips haemorrhoidalis (greenhouse thrips)

Hemiberlesia lataniae (latania scale)

Lindingaspis rossi (Ross' black scale)

Nezara viridula (green vegetable bug)

Phytophthora spp. (fruit rots)

Polyphagotarsonemus latus (broad mite)

Saissetia coffeae (hemispherical scale)

Scolypopa australis (passion vine hopper)

Tetranychus urticae (two-spotted mite)

AUSTRALIA - NEW ZEALAND BQA PEST LIST - BANANA *Musa*

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera aquilonis (fruit fly)
Bactrocera jarvisi (Jarvis fruit fly)
Bactrocera musae (banana fruit fly)
Bactrocera tryoni (Queensland fruit fly)

B. MPL = 0.5%, = Nil in a 600 unit sample

Aleurodicus spiniferus (coconut whitefly)
Amblypelta lutescens (Banana spotting bug)
Aonidiella orientalis (Oriental scale)
Aphididae (aphids)
Aspidiotus destructor (transparent scale)
Atherigona orientalis (muscid fly)
Austracris guttulosa (spur-throated locust)
Brevipalpus lewisi (bunch mite)
Calliphora imperialis (blowfly)
Camponotus spp. (carpenter ants)
Ceroplastes rubens (pink wax scale)
Chaetanaphothrips signipennis (banana rust thrips)
Cosmopolites sordidus (banana weevil borer)
Dasynus fuscescens (fruit spotting bug)
Dermolepida albobirtum (grey back cane beetle)
Geloptera miracula (chrysomelid beetle)
Graptostethus servus (lygaeid bug)
Helicoverpa assulta (cape gooseberry budworm)
Hermimia cenoecalis (noctuid moth)
Isotenes miserana (orange fruit borer)
Lamprosema octasema (banana scab moth)
Leptoglossus australis (squash bug)
Monolepta australis (red shouldered leaf beetle)
Oiketicus elongatus (Saunders' case moth)
Opogona glycyphaga (sugarcane budmoth)
Orgyia australis (tussock moth)
Othreis fullonia (fruitpeircing moth)
Othreis materna (fruit peircing moth)
Phyllocoptruta musae (banana mite)
Pinnaspis aspidestreae (fern scale)
Planococcus citri (citrus mealybug)

Banana quarantine pest lists continued

Planococcus pacificus (citrus mealybug)
Polytus mellerborgii (weevil)
Rhopaea magnicornis (scarab beetle)
Rhyparida discopunctulata (black swarming leaf beetle)
Tetranychus marianae (spider mite)
Thrips florum (flower thrips)
Thrips florum (thrips)
Tiracola plagiata (banana fruit caterpillar)
Tirathaba rufivena (fruit borer)
Xenothictis sciaphila (tortricid)

Seeds

Baccharis halilifolia
Cenchrus spp. (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)
Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silver leaf nightshade)
Sorghum x almum (Columbus grass)
Sorghum halepense (Johnson grass)
Tribulus spp. (caltrop)
Xanthium spp. (except *X. spinosum*) (burr)

Diseases

Ceratocystis paradoxa (fruit rot)
Cercospora hayi (fruit spot)
Deightoniella torulosa (fruit spot)
Guignardia musae (fruit freckle)
Phomopsis musicola (blossom end rot)
Phyllachora musicola (black cross disease)
Phytophthora palmivora (phytophthora rot)
Pyricularia grisea (fruit spot)
Verticillium theobromae (cigar end rot)

C. Soil Contamination: MPL = 25 grams per 600 unit sample**1.2 Non - Quarantine Pests**

Abgrallaspis cyanophylli (cyanophyllum scale)
Aspidiotus nerii (oleander scale)
Brevipalpus californicus (bunch mite)
Brevipalpus obovatus (privet mite)
Brevipalpus phoenicis (passionvine mite)
Chrysodeixis eriosoma (green looper)

Banana non- quarantine pests/organisms lists continued

Coccus hesperidum (brown soft scale)

Hemiberlesia lataniae (latania scale)

Hercinothrips bicinctus (banana silvering thrips)

Heteronychus arator (black beetle)

Listroderes difficilis (vegetable weevil)

Polyphagotarsonemus latus (broad mite)

Spodoptera litura (tropical army worm)

Tetranychus lambi (strawberry spider mite)

Tetranychus urticae (two-spotted mite)

NOTES

Most of the disease organisms are present in banana growing areas worldwide. No special conditions need to be applied to fruits being exported to New Zealand. Fruit should be sound on arrival and free of spotting, rots and other disease symptoms.

No special disease endorsements are required for banana fruit from Australia.

No endorsements or mandatory treatments for insect pests apart from fruit flies are required.

AUSTRALIA - NEW ZEALAND BQA
PEST LIST - CAPSICUM *capsicum annuum*

COMMODITY AT PRESENT SUSPENDED FOR EXPORT

1. MAXIMUM PEST LIMITS (MPLs)

The following MPLs will apply to listed "pests" in the three (3) categories A through C below:

A. MPL = 5 pests per million units

Bactrocera bryoniae (fruit fly)

Bactrocera tryoni (Queensland fruit fly)

B. MPL = 0.5%, = Nil in a 600 unit sample

Aphididae (Aphids)

Atherigona orientalis (muscid fly)

Austroasca viridigrisea (vegetable jassid)

Cryptoblabes gnidiella (pyralid moth)

Dindymus versicolor (harlequin bug)

Epilachna spp. (leaf eating ladybirds)

Gonocephalum carpentariae (Northern false wireworm)

Leptocoris mitellata (leptocoris bug)

Nysius vinitor (Rutherglen bug)

Phthorimea operculella (potato tuber moth)

Plautia affinis (green stink bug)

Seeds

Baccharis halimifolia

Cenchrus spp. (except *C. ciliaris*)

Chondrilla juncea (skeleton weed)

Eragrostis curvula (African love grass)

Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)

Pennisetum alopecuroides (Chinese pennisetum)

Pennisetum macrourum (African feather grass)

Pennisetum polstachyon (mission grass)

Phragmites spp.

Solanum elaeagnifolium (silver leaf nightshade)

Sorghum x almum (Columbus grass)

Sorghum halepense (Johnson grass)

Tribulus spp. (caltrop)

Xanthium spp (except *X. spinosum*) (burr)

Capsicum Pest Lists continued**C. Soil Contamination: MPL = 25 grams per 600 unit sample****1.2 Non Quarantine Organisms***Chrysodeixis eriosoma* (green looper)*Heliothis armigera* (corn earworm)*Nezara viridula* (green vegetable bug)*Polyphagotarsonemus latus* (broad mite)*Sceliodes cordalis* (eggfruit caterpillar)*Spodoptera litura* (tropical armyworm)*Tetranychus urticae* (two-spotted mite)*Trialeurodes vaporariorum* (greenhouse whitefly)

Non venomous spiders, oribatid mites, predatory mites, predatory insects, vinegar flies and fungal rots.

COMMODITY AT PRESENT SUSPENDED FROM EXPORT

AUSTRALIA - NEW ZEALAND BQA PEST LIST - CITRUS *Citrus* spp.

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera aquilonis (fruit fly)
Bactrocera halfordiae (fruit fly)
Bactrocera jarvisi (fruit fly)
Bactrocera neohumeralis (fruit fly)
Bactrocera tryoni (Queensland fruit fly)
Ceratitis capitata (Mediterranean fruit fly)
Dirioxa pornia (Island fruit fly)

B. MPL = 0.5%, = Nil in a 600 unit sample

Asterobemisia helyi (whitefly) ✓
Aphididae (aphids)
Orchamoplatus citri (Australian citrus whitefly) ✓
Aonidiella citrini (yellow scale) ✓
Aonidiella orientalis (scale) ✓
Ceroplastes rubens (pink wax scale) ✓
Coccus viridus (green scale) ✓
Coccus pseudomagnoliarum (citricola scale) ✓
Chrysomphalus aonidum (circular black scale) ✓
Chrysomphalus dictyospermi (Spanish red scale) ✓
Lepidosaphes gloverii (Glover's scale) ✓
Lepidosaphes pallida (mussel scale) ✓
Pulvinaria cellulosa (pulvinaria scale) ✓
Unaspis citri (white louse scale) ✓
Ferrisia virgata (striped mealybug) ✓
Maconellicoccus hirsutus (mealybug) ✓
Nipaecoccus viridis (mealybug) ✓
Planococcus citri (citrus mealybug)
Planococcus pacificus (mealybug) ✓
Amblypelta brevicornis (fruit spotting bug) ✓
Austropeplus sp (citrus blossom bug) ✓
Biprorulus bibax (spined citrus bug) ✓
Colgaroides acuminata (moth bug) ✓
Leptoglossus australis (squash bug)
Mictis profana (crusader bug) ✓
Musgraveia sulciventris (bronze orange bug) ✓
Nysius vinitor (Rutherglen bug) ✓
Siphanta hebes (moth bug) ✓

Citrus Quarantine Pests Lists continued

Tropidochila sordida (lace bug) ✓
Chaetanaphothrips orchidii (citrus rust thrips) ✓
Haplothrips godweyi (thrips) ✓
Scirtothrips albomaculatus (thrips) ✓
Scirtothrips signipennis (thrips) ✓
Atherigona orientalis (muscid) ✓
Cryptoblabes adoceta (false blossom moth) ✓
Cryptoblabes hemigypsa (false blossom moth) ✓
Cogonethes punctiferalis (pyralid moth) ✓
Eudocima salamina (noctuid moth) ✓
Hyalarcta huebneri (leaf case moth) ✓
Ischja albata (noctuid moth) ✓
Lagoptera regia (noctuid moth) ✓
Mocis frugalis (noctuid moth) ✓
Oiketicus elongatus (case moth) ✓
Othreis fullonia (fruit sucking moth) ✓
Othreis materna (fruit sucking moth) ✓
Othreis tyrannus (fruit sucking moth) ✓
Papilio aegeus (large citrus butterfly) ✓
Papilio anactus (small citrus butterfly) ✓
Parallelia palumba (noctuid moth) ✓
Phyllocnistis citrella (citrus leafminer) ✓
Prays parilis (lemon bud moth) ✓
Tiracola plagiata (cacao armyworm) ✓
Adoxophyes templan (leafroller) ✓
Epiphyas spp. (leafrollers) ✓
Isotenes miserana (orange fruit borer) ✓
Cosmopteryx schismatias (leaf miner) ✓
Lophodes sinistraria (looper caterpillar) ✓
Comana humeralis (slug caterpillar) ✓
Bruchophagus fellis (citrus gall wasp) ✓
Myrmecia spp. (bulldog ants) ✓
Camponotus spp. (carpenter ants) ✓
Protaetia fusca (flower beetle) ✓
Glycyphana stolata (scarabaeid) ✓
Bostrychopsis jesuita (bostrychid borer) ✓
Melobasis purperescens (jewel beetle) ✓
Dihammus vastator (fig longicorn) ✓
Paradisterna plumifera (speckled longicorn) ✓
Platyomopsis pulverulens (longhorn beetle) ✓
Skeletodes tetrops (citrus longicorn) ✓
Stenocentrus ostricilla (longhorn beetle) ✓
Strongylurus thoracicus (pittosporum longicorn) ✓
Uracanthus cryptophagus (citrus branch borer) ✓
Aulacophora hilaris (pumpkin beetle) ✓
Geloptera miracula (leaf beetle) ✓

Citrus Quarantine Pest Lists continued

Geloptera porosa (pitted apple beetle) ✓
Monolepta australis (monolepta beetle) ✓
Rhyparida spp. (leaf beetles) ✓
Crossotarsus subpellucidus (weevil) ✓
Eutinophaea bicristata (citrus leaf-eating weevil) ✓
Leptopius squalidus (fruit tree root weevil) ✓
Myllocerus multimaculata (broad nosed weevil) ✓
Neomerimnetes sobrinus (weevil) ✓
Orthorhinus cylindrirostris (elephant weevil) ✓
Otiorhynchus cribricollis (apple weevil) ✓
Peripagis limbatus (weevil) ✓
Perperus angustibasis (weevil) ✓
Perperus lateralis (white striped weevil) ✓
Pseudomydaus citriperda (weevil) ✓
Sternocorynus neglectus (weevil) ✓
Tegolophus australis (brown citrus rust mite) ✓
Brevipalpus lewisi (bunch mite) ✓
Eutetranychus banksi (Texas citrus mite) ✓
Eutetranychus orientalis (Oriental red mite) ✓
Tetranychus neocaledonicus (vegetable mite) ✓

Diseases

Guignardia citricarpa (citrus black spot)

Seeds

Baccharis halimifolia
Cenchrus spp. (except *C.ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrotis curvula (African love grass)
Lycium spp. (except *L.barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silverleaf nightshade)
Sorghum x alnum (Columbus grass)
Sorghum halepense (Johnson grass)
Tribulus spp.
Xanthium spp. (except *X. spinosum*)

C. Non - Quarantine Pests

Aonidiella aurantii (Californian red scale) ✓
Aspidiotus nerii (oleander scale) ✓
Ceroplastes destructor (white wax scale) ✓
Ceroplastes sinensis (Chinese wax scale) ✓
Coccus hesperidum (soft brown scale) ✓
Coccus longulus (long soft scale) ✓

Citrus Non-quarantine pests continued

Icerya purchasi (cottony cushion scale) ✓
Lepidosaphes beckii (mussel scale)
Parlatoria pergandii (chaff scale) ✓
Saissetia coffeae (hemispherical scale) ✓
Saissetia oleae (black scale) ✓
Pseudococcus calceolariae (citrophilous mealybug) ✓
Pseudococcus longispinus (long tailed mealybug) ✓
Scolypopa australis (passion vine hopper) ✓
Nezara viridula (green vegetable bug) ✓
Pseudanaphothrips achaetus (thrips) ✓
Heliothrips haemorrhoidalis (greenhouse thrips) ✓
Megalurothrips kellyanus (thrips)
Thrips australis (thrips) ✓
Thrips imaginis (plague thrips) ✓
Thrips tabaci (onion thrips) ✓
Merophyas divulsana (Australian lucerne leafroller) ✓
Agrius convolvuli (convolvulus hawk moth) ✓
Spodoptera litura (tropical armyworm) ✓
Heliothis armigera (corn earworm)
Carpophilus hemipterus (dried fruit beetle) ✓
Carpophilus maculatus (dried fruit beetle) — Cat 1
Maleuterpes spinipes (dicky rice weevil) ✓
Asynonychus cervinus (Fuller's rose weevil) ✓
Eriophyes sheldoni (citrus bud mite) ✓
Phyllocoptruta oleivora (citrus rust mite) ✓
Polyphagotarsonemus latus (broad mite) ✓
Panonychus citri (citrus red mite) ✓
Tetranychus urticae (two spotted mite) ✓
Brevipalpus phoenicis (red crevice mite) ✓
Brevipalpus californicus (false spider mite) ✓
Brevipalpus obovatus (privet mite)

Non-venomous spiders, predatory mites, predatory insects, vinegar flies, fungal rots.

AUSTRALIA - NEW ZEALAND BQA PEST LIST - CUCURBITS

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Tephritidae (fruit flies)

B MPL = 0.5%, = Nil infested units in a 600 unit sample

Pests

Caterpillars

Aphids

Leaf eating beetles (*Chrysomelidae*)

Cucurbit stem borer (*Apomecyna histria*)

Plant sucking bugs (excluding *Nezara viridula*)

Fruit maggots (*Atherigona* sp.)

Seeds

Baccharis spp.

Cenchrus spp. (except *C. ciliaris*)

Chondrilla juncea (skeleton weed)

Cyperus spp (excepting *C. brevifolius*, *C. eragrostis*, *C. esculentus* and *C. rotundus*)

Eragrostis curvula (African love grass)

Lycium spp. (excepting *L. chinese* and *L. ferocissimum*) (boxthorn)

Pennisetum alopecuroides (Chinese pennisetum)

Pennisetum macrourum (African feather grass)

Phragmites spp.

Solanum elaeagnifolium (silver leaf nightshade)

Sorghum x alnum (Columbus grass)

Sorghum halepense (Johnson grass)

Tribulus spp. (caltrop)

Xanthium spp. (excepting *X. spinosum*)

C. Non-Quarantine Organisms

Scale

Mealybugs

thrips

ants

mites

Nezara viridula (green vegetable bug)

Fungus beetles

Spiders (other than venomous)

Parasitic wasps

Vinegar fly

Dried fruit beetles

Predatory mites

Obvious "hitch-hiker" pests

AUSTRALIA - NEW ZEALAND BQA

PEST LIST - EGGPLANT (*Solanum melongena*)

MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera tryoni Queensland Fruit Fly

B. MPL - 0.5% = Nil infested fruits in a 600 unit sample

<i>Agrotis spp</i>	Cutworms
<i>Aonidiella orientalis</i>	Oriental scale
<i>Aphis craccivora</i>	Cow pea aphid
<i>Aphis fabae</i>	Bean aphid
<i>Aphis gossypii</i>	Cotton aphid
<i>Argyrogramma signata</i>	Noctuid moth
<i>Atherigona orientalis</i>	Muscid fly
<i>Aulacorthum solani</i>	Foxglove aphid
<i>Austroasca viridigrisea</i>	Vegetable leafhopper
<i>Bemisia tabaci</i>	Tobacco whitefly
<i>Chrysodeixis spp.</i>	Loopers
<i>Conogethes punctiferalis</i>	Yellow peach moth
<i>Dindymus versicolor</i>	Harlequin bug
<i>Drosiphila spp.</i>	Ferment flies
<i>Epilachna vigintioctopunctata</i>	Leafeating ladybird
<i>Gryllotalpa spp.</i>	Mole crickets
<i>Heliothis assulta</i>	Cape gooseberry budworm
<i>Lamprolonchaea brouniana</i>	Metallic green tomato fly
<i>Leptocoris mitellatus</i>	Leptocoris bug
<i>Leptocrisa acuta</i>	Rice bug
<i>Macrosiphum euphorbiae</i>	Potato aphid
<i>Myzus persicae</i>	Green peach aphid
<i>Nysius vinitor</i>	Rutherglen bug
<i>Phaulacridium vittatum</i>	Wingless grasshopper
<i>Phenacoccus parvus</i>	Mealybug
<i>Phthorimaea operculella</i>	Potato moth
<i>Plautia affinis</i>	Green stink bug
<i>Plusia spp</i>	Semiloopers
<i>Scorbiopalpa heliopa</i>	Eggplant budworm
<i>Tetranychus desertorum</i>	Desert spider mite

AUSTRALIA - NEW ZEALAND BQA PEST LIST - GRAPES *vitis* spp

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera tryoni (Queensland fruit fly)

Ceratitis capitata (Mediterranean fruit fly)

B. MPL - 5%, = Nil infested fruits in a 600 unit sample

Aphididae (aphids)

Dysdercus sidae (pale cotton stainer)

Mictis profana (crusader bug)

Nysius vinitor (Rutherglen bug)

Oxycarenus arctatus (coon bug)

Plautia affinis (green stink bug)

Scutiphora pedicellata (metallic shield bug)

Haplothrips froggatti (black plague thrips)

Agrotis munda (cutworm)

Epiphyas spp. (leafrollers)

Hippotion celerio (grapevine hawk moth)

Hyalarcta huebneri (leaf case moth)

Porthesia paradoxa (tussock moth)

Theretra oldenlandiae (vine hawk moth)

Camponotus spp. (carpenter ants)

Myrmecia spp. (bulldog ants)

Diphucephala sp (green scarab)

Dilochrosis atripennis (flower chafer)

Dihammus vastator (fig longicorn)

Haltica gravida (metallic flea beetle)

Monolepta australis (red shouldered leaf beetle)

Monolepta divisa (small monolepta beetle)

Orthorhinus cylindrirostris (elephant weevil)

Otiorhynchus klugi (vine weevil)

Brevipalpus lewisi (bunch mite)

Seeds

Baccharis halimifolia

Cenchrus spp. (except *C. ciliaris*)

Chondrilla juncea (skeleton weed)

Eragrostis curvula (African love grass)

Lycium spp. (except *L. barbarum*, *L. ferocissimum*)

Pennisetum alopecuroides (Chinese pennisetum)

Quarantine pest and weed seed lists

Trialeurodes vaporariorum Greenhouse whitefly**Weedseeds***Baccharis* spp.*Cenchrus* spp. (except *C. ciliaris*)*Chondrilla juncea* (skeleton weed)*Cyperus* spp (excepting *C. brevifolius*, *C. eragrostis*, *C. esculentus* and *C. rotundus*)*Eragrostis curvula* (African love grass)*Lycium* spp. (excepting *L. chinese* and *L. ferocissimum*) (boxthorn)*Pennisetum alopecuroides* (Chinese pennisetum)*Pennisetum macrourum* (African feather grass)*Phragmites* spp.*Solanum elaeagnifolium* (silver leaf nightshade)*Sorghum x alnum* (Columbus grass)*Sorghum halepense* (Johnson grass)*Tribulus* spp. (caltrop)*Xanthium* spp. (excepting *X. spinosum*)**Fungi***Alternaria* spp Leaf spot*Ascochyta lycopersici* Leaf spot*Fusarium* sp. Root and stem rot*Phomopsis vexans* Fruit rot**C. Non-quarantine organisms***Aculops lycopersici* Tomato russet mite*Graphognathus leucoloma* Whitefringed weevil*Helicoverpa armigera* Bollworm*Listroderes obliquus* Vegetable weevil*Nezara viridula* Green vegetable bug*Polyphagotarsonemus latus* Broad mite*Pseudococcus longispinus* Longtailed mealybug*Saissetia coffeae* Hemispherical scale*Sceliodes cordalis* eggplant caterpillar*Spodoptera litura* Cluster caterpillar*Symmetrischema plaesiosema* Tomato stem borer*Teleogryllus commodus* Black field cricket*Tetranychus cinnabarinus* Carmine spider mite*Thrips tabaci* Onion thrips

AUSTRALIA - NEW ZEALAND BQA
PEST LIST - POMEGRANATE (*Punica granatum*)

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

<i>Bactrocera jarvisi</i>	Jarvis' fruitfly
<i>Bactrocera tryoni</i>	Queensland fruitfly
<i>Ceratitis capitata</i>	Mediterranean fruit fly

B. MPL = 0.5%, = Nil infested fruits in a 600 unit sample

<i>Aphis citricola</i>	Citrus aphid
<i>Aphis gossypii</i>	Cotton aphid
<i>Aulacorthum circumflexum</i>	Lily aphid
<i>Ectomyelois</i> sp.	Carob moth
<i>Myzus ornatus</i>	Ornate aphid
<i>Myzus persicae</i>	Green peach aphid
<i>Orthorhinus cylindrirostris</i>	Elephant weevil
<i>Oxycarenus arctatus</i>	Coon bug
<i>Tetranychus</i> spp.	Mites

Weedseeds

Baccharis halimifolia
Cenchrus spp. (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)
Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silver leaf nightshade)
Sorghum x almum (Columbus grass)
Sorghum halapense (Johnson grass)
Tribulus spp. (caltrop)
Xanthium spp (except *X. spinosum*) (burr)

Fungi

<i>Athelia rolfsii</i>	Rolf's disease
<i>Botrytis cinerea</i>	Grey mould

Grapes Quarantine Pests and Weed Seeds Lists continued

Pennisetum macrourum (African feather grass)

Pennisetum polstachyon (mission grass)

Phragmites spp.

Solanum elaeagnifolium (silverleaf nightshade)

Sorghum x almum (Columbus grass)

Sorghum halapense (Johnson grass)

Tribulus spp. (caltrop)

Xanthium spp. (except *X. spinosum*) (burr)

C. Non-quarantine organisms

Coccus persicae (grapevine scale)

Pseudococcus longispinus (longtailed mealybug)

Pseudococcus affinis (Californian mealybug)

Nezara viridula (green vegetable bug)

Heliothrips haemorrhoidalis (greenhouse thrips)

Thrips imaginis (plagus thrips)

Phalaenoides glycinae (grapevine moth)

Heteronychus arator (black beetle)

Asynonychus cervinus (Fuller's rose weevil)

Colomerus vitis (grape leaf blister mite)

Calepitrimerus vitis (grape leaf rust mite)

Polyphagotarsonemus latus (broad mite)

Tetrenychus urticae (two-spotted mite)

Non-venomous spiders, predatory mites, predatory insects, vinegar flies, fungal rots.

AUSTRALIA - NEW ZEALAND BQA
PEST LIST MANGOES - *mangifera indica*

COMMODITY AT PRESENT SUSPENDED FROM EXPORT

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera jarvisi (Jarvis' fruit fly)
Bactrocera neohumeralis (fruit fly)
Bactrocera tryoni (Queensland fruit fly)
Ceratitis capitata (Mediterranean fruit fly)

B. MPL = 0.5%, = Nil infested fruits in a 600 unit sample

Colgaroides acuminata (mango flatid)
Aspidiotus destructor (coconut scale)
Aulacaspis tubercularis (common mango scale)
Cereplastes rubens (pink wax scale)
Chrysomphalus aonidum (circular black scale)
Ischnaspis longirostris (black line scale)
Phenacaspis dilatata (mango scale)
Selenothrips rubrocinctus (red banded thrips)
Bombotelia jocosatrix (large mango tip borer)
Peperita euthysticha (small mango tip borer)
Othreis fullonia (fruit peircing moth)

Seeds

Baccharis halimifolia
Cenchrus spp. (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)
Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (Boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silver leaf nightshade)
Sorghum x almum (Columbus grass)
Sorghum halapense (Johnson grass)
Tribulus spp. (caltrop)
Xanthium spp. (except *X. spinosum*) (burr)

Mango Pest and Weed Seeds Lists continued**C. Non-quarantine Organisms***Icerya purchasi* (cotton cushion scale)*Pseudococcus longispinus* (longtailed mealybug)*Heliothis armigera* (tomato fruit worm)*Sternochetus mangiferae* (mango seed weevil)*Polyphagotarsonemus latus* (broad mite)

Non-venomous spiders, predatory mites, predatory insects, vinegar flies fungal rots.

**AUSTRALIA - NEW ZEALAND BQA
PEST LIST - PAWPAW *Carica papaya***

COMMODITY AT PRESENT SUSPENDED FROM EXPORT

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million

Bactrocera cucumis (cucumber fly)
Bactrocera neohumeralis (fruit fly)
Bactrocera tryoni (Queensland fruit fly)
Ceratitis capitata (Mediterranean fruit fly)

B. MPL = 0.5%, = Nil infested fruits in a 600 unit sample

Orosius argentatus (brown leafhopper)
Aonidiella orientalis (oriental scale)
Amblypelta lutescens (banana spotting bug)
Atherigona orientalis (muscid fly)
Dichocrocis punctiferalis (yellow peach moth)
Tetranychus desertorum (desert spider mite)
Tetranychus neocaledonicus (vegetable mite)

Seeds

Baccharis halimifolia
Cenchrus spp. (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)
Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silver leaf nightshade)
Sorghum x alnum (Columbus grass)
Sorghum halapense (Johnson grass)
Tribulus spp. (caltrop)
Xanthium spp (except *X. spinosum*) (burr)

C. Non - quarantine Organisms

Coccus hesperidum (soft brown scale)
Brevipalpus phoenicis (red crevice mite)
Polyphagotarsonemus latus (broad mite)

Non-venomous spiders, predatory mites, predatory insects, vinegar flies, fungal rots.

AUSTRALIA - NEW ZEALAND PEST LIST - PINEAPPLE *Ananas comosus*

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million

Nil

B. MPL = 0.5 %, = Nil infested fruits in a 600 unit sample

Rhinotermes intermedius (termite)
Diaspis bromeliae (pineapple scale)
Dysmicoccus brevipes (pineapple mealybug)
Atherigona orientalis (muscid fly)
Anoplognathus porosus (Christmas beetle)
Antitrogus mussoni (white grubs)
Lepidiota sp (white grubs)
Rhopaea sp (white grubs)
Hanseniella sp (symphylan)
Tarsonemus ananas (pineapple mite)

Seeds

Baccharis halimifolia
Cenchrus spp. (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)
Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silver leaf nightshade)
Sorghum x almum (Columbus grass)
Sorghum halapense (Johnson grass)
Tribulus spp. (caltrop)
Xanthium spp (except *X. spinosum*) (burr)

C. Non-quarantine Organisms

Carpophilus spp. (dried fruit beetles)

Non-venomous spiders, predatory mites, predatory insects, vinegar flies, fungal rots.

AUSTRALIA - NEW ZEALAND BQA PEST LIST - POMEFRUIT *Malus*; *Pyrus*; *cydonia*

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera aquilonis (fruit fly)
Bactrocera jarvisi (fruit fly)
Bactrocera neohumeralis (fruit fly)
Bactrocera tryoni (Queensland fruit fly)
Ceratitis capitata (Mediterranean fruit fly)

B. MPL = 0.5%, = Nil infested fruits in a 600 unit sample

Aphididae (Aphids)
Eriosoma pyricola (pear root aphid)
Ceroplastes ceriferus (Indian white wax scale)
Ceroplastes rubens (pink wax scale)
Eulecanium pruinsum (wax scale)
Chrysomphalus dictyospermi (Spanish red scale)
Duplaspidotus claviger (dupla scale)
Parlatoria proteus (orchid parlatoria scale)
Quadraspidiotus pyri (pear scale)
Campylomma livida (apple dimpling bug)
Niastama punctaticollis (mirid bug)
Scutiphora pedicellata (metallic shield bug)
Nysius vinitor (Rutherglen bug)
Haplothrips froggatti (black plague thrips)
Mythimna convecta (common armyworm)
Othreis fullonia (fruit sucking moth)
Othreis materna (fruit sucking moth)
Teia anartoides (painted apple moth)
Orgyia australis (painted pine moth)
Hyalarcta huebneri (leaf case moth)
Chloroclystis laticostata (cherry looper)
Cryptophasa melanostigma (fruit tree borer)
Epiphyas spp. (leafrollers)
Isotenes miserana (orange fruit borer)
Myrmecia spp. (bulldog ants)
Camponotus spp. (carpenter ants)
Heteronyx piceus (scarabaeid)
Anoplognathus spp. (Christmas beetles)
Ditropidus maxillosa (leaf beetle)
Colaspoides heroni (leaf beetle)

Pomefruits Quarantine Pests and Weed Seed Lists continued

Gelopecta porosa (pitted apple beetle)
Monolepta australis (monolepta beetle)
Rhyparida dimidiata (sugarcane leaf beetle)
Rhyparida polymorpha (leaf beetle)
Lagria grandis (honeybrown beetle)
Euthyrhinus mediatundus (weevil)
Leptopius squalidus (fruit tree root weevil)
Menios internatus (weevil)
Orthorhinus cylindrirostris (elephant weevil)
Otiorynchus cribricollis (apple weevil)
Perperus spp. (apple root weevils)
Xyleborus perforans (island pinhole borer)
Xyleborus pseudosolidus (pinhole borer)

Diseases

Guignardia citricarpa (citrus black spot)
Monilinia fructigena (brown rot)
Monilinia laxa forma mali (brown rot)

Seeds

Baccharis halimifolia
Cenchrus spp. (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)
Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silver leaf nightshade)
Sorghum x alium (Columbus grass)
Sorghum halapense (Johnson grass)
Tribulus spp. (caltrop)
Xanthium spp (except *X. spinosum*) (burr)

C. Non-quarantine Organisms

Typhlocyba frogatti (apple leafhopper)
Eriosoma lanigerum (woolly aphid)
Ceroplastes destructor (white wax scale)
Coccus hesperidum (soft brown scale)
Saissetia oleae (black scale)
Quadraspidotus ostreaeformis (oystershell scale)
Quadraspidotus perniciosus (San Jose scale)
Hemiberlesia lataniae (lantania scale)
Hemiberlesia rapax (greedy scale)
Parlatoria pittospori (mauve pittosporum scale)

Pomefruits - Non-quarantine pests continued

Lepidosaphes ulmi (apple mussel scale)
Pseudococcus affinis (mealybug)
Pseudococcus longispinus (long tailed mealybug)
Nezara viridula (green vegetable bug)
Thrips imaginis (plague thrips)
Cydia molesta (oriental fruit moth)
Cydia pomonella (codling moth)
Chrysodeixis eriosoma (green looper)
Heliothis punctiger (budworm)
Spodoptera litura (tropical armyworm)
Diarsia intermixta (noctuid)
Caliroa cerasi (pear slug)
Asynonychus cervinus (Fuller's rose weevil)
Sitophilus oryzae (rice weevil)
Sitophilus zeamais (maize weevil)
Xyleborinus eucalyptus (eucalyptus pinhole borer)
Xyleborinus saxeseni (fruit tree pinhole borer)
Phlyctinus callosus (garden weevil)
Aculus schlechtendali (apple rust mite)
Phytoptus pyri (pear leaf blister mite)
Brevipalpus obovatus (privet mite)
Brevipalpus phoenicis (passionvine mite)
Bryobia rubrioculus (brown mite)
Tetranychus lambi (banana mite)
Tetranychus urticae (two-spotted mite)

Non-venomous spiders, predatory mites, predatory insects, vinegar flies, fungal rots.

AUSTRALIA - NEWZEALAND BQA
PEST LIST - STONEFRUITS
(Incl. Peaches, Nectarines, Plums, Apricots Cherries etc)

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Fruit flies (Tephritidae)

B. MPL = 0.5%, = Nil infested fruits in a 600 unit sample

Pests

Lepidoptera All species except codling moth (*Cydia pomonella*)
tomato fruit worm (*Heliothis armigera*)
green looper (*Chrysodeixis eriosoma*)
tropical army worm (*Spodoptera litura*)
oriental fruit moth (*Cydia molesta*)

Plant sucking All species except green vegetable bug (*Nezara viridula*)
bugs

Beetles pitted apple beetle (*Geloptera parosa*)
soldier beetle (*Chauliognathus lugubris*)
green scarab (*Diphucephala* sp.)
leaf eating beetles (*Chrysomelidae*)

Aphids All species except woolly aphid (*Eriosoma lanigerum*)

Muscid Fly (*Atherigona orientalis*)

Weevils All species except Fuller's Rose Weevil (*Asynonychus cervinus*) and white
fringed weevil (*Graphognathus leucoloma*)

Seeds

Baccharis halimifolia

Cenchrus spp. (except *C. ciliaris*)

Chondrilla juncea (skeleton weed)

Eragrostis curvula (African love grass)

Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)

Pennisetum alopecuroides (Chinese pennisetum)

Pennisetum macrourum (African feather grass)

Pennisetum polstachyon (mission grass)

Phragmites spp.

Solanum elaeagnifolium (silver leaf nightshade)

Stonefruits - Pests and Weed Seed Lists continued*Sorghum x alnum* (Columbus grass)*Sorghum halapense* (Johnson grass)*Tribulus* spp. (caltrop)*Xanthium* spp (except *X. spinosum*) (burr)**C. Non-quarantine Organisms**

Scale

Quadraspidiotus perniciosus (San Jose's Scale)*Parlatoria pittospori* (mauve pittosperum scale)*Lepidosaphes ulmi* (apple mussel scale)

Plague thrips

Thrips imaginis

Mites

Tetranychus urticae, *Panonychus ulmi*,*Bryobia rubiocolus*

Mealy bug

Pseudococcidae

Tomato fruit worm

Heliothis armigera

Green loopers

Chrysodeixis eriosoma

Tropical army worm

Spodoptera litura

Green vegetable bug

Nezara viridula

Cherry slug

Caliroa cerasi

Codling moth

Cydia pomonella

Oriental fruit moth

Cydia molesta

Woolly aphid

Eriosoma lanigerum

Fuller's Rose weevil

Asynonychus cervinus

White fringed weevil

Graphognathus leucoloma

Ants

Formicidae

Crickets and grasshoppers

Spiders (excepting venomous species), Oribatid mites, dried fruit beetles, fungus beetles, vinegar flies, fungal storage rots etc.

**AUSTRALIA - NEW ZEALAND BQA
PEST LIST - POMEGRANATE (*Punica granatum*)**

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

<i>Bactrocera jarvisi</i>	Jarvis' fruitfly
<i>Bactrocera tryoni</i>	Queensland fruitfly
<i>Ceratitis capitata</i>	Mediterranean fruit fly

B. MPL = 0.5%, = Nil infested fruits in a 600 unit sample

<i>Aphis citricola</i>	Citrus aphid
<i>Aphis gossypii</i>	Cotton aphid
<i>Aulacorthum circumflexum</i>	Lily aphid
<i>Ectomyelois sp.</i>	Carob moth
<i>Myzus ornatus</i>	Ornate aphid
<i>Myzus persicae</i>	Green peach aphid
<i>Orthorhinus cylindrirostris</i>	Elephant weevil
<i>Oxycarenus arctatus</i>	Coon bug
<i>Tetranychus spp.</i>	Mites

Weedseeds

Baccharis halimifolia
Cenchrus spp. (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)
Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silver leaf nightshade)
Sorghum x alnum (Columbus grass)
Sorghum halapense (Johnson grass)
Tribulus spp. (caltrop)
Xanthium spp (except *X. spinosum*) (burr)

Fungi

<i>Athelia rolfsii</i>	Rolf's disease
<i>Botrytis cinerea</i>	Grey mould

AUSTRALIA - NEW ZEALAND BQA PEST LIST - STRAWBERRY *Fragaria*

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera neohumeralis (fruit fly)
Bactrocera tryoni (Queensland fruit fly)
Ceratitis capitata (Mediterranean fruit fly)

B. MPL = 0.5 %, = Nil infested fruits in a 600 unit sample

Aphididae (aphids)
Corizococcus arecae (mealy bug)
Dysmicoccus brevipes (pineapple mealybug)
Planococcus citri (citrus mealybug)
Euander lacertosus (lygaeid bug)
Nysius clevelandensis (lygaeid bug)
Nysius vinitor (Rutherglen bug)
Calocoris hobartensis (capsid)
Anaxilaus vesiculosus (pentatomid)
Dindymus versicolor (harlequin bug)
Cryptoptila immersana (leafroller)
Epiphyas spp. (leafroller)
Isotenes miserana (orange fruit borer)
Hyalacta huebneri (bag moth)
Lepidiotia frenchi (French's canegrub)
Metanastes vulgivagus (black beetle)
Repsimus aeneus (white grub)
Sericesthis geminata (pruinose scarab)
Sericesthis nigrolineata (dusky pasture scarab)
Chauliognathus lugubris (soldier beetle)
Haltica corrusca (flea beetle)
Haltica pagana (flea beetle)
Orthorhinus aethops (weevil)
Otiorynchus cribricollis (apple weevil)
Rhadinomus lacordairei (thin strawberry weevil)
Rhinaria perdix (strawberry weevil)

Seeds

Baccharis halimifolia
Cenchrus spp. (except *C. ciliaris*)
Chondrilla juncea (skeleton weed)
Eragrostis curvula (African love grass)

Quarantine pest and weed seed lists

<i>Colletotrichum acutatum</i>	Anthracnose
<i>Rhizoctonia solani</i>	Plant rot
<i>Sclerotinia sclerotiorum</i>	Sclerotinia rot
<i>Verticillium dahliae</i>	Verticillium wilt

Bacteria

<i>Pseudomonas solanacearum</i>	Bacterial wilt
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4.3. Exporters

Exporters are responsible for the following:

- that they are sourcing produce from growers and packers who are registered under the terms and conditions of this Manual,
- must ensure 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 of product,
- 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,
- must liaise with State Departments 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.

4.4. Treatment Centres

Treatment centre operators must ensure the following:

- that all produce to be exported to New Zealand is treated in accordance with the instructions contained in this Manual (Section 5),
- that produce is able to be identified at all times,
- records are made and maintained for all treatment performed and to be identified by lots treated,
- ensure that procedures are in place and carried out to prevent cross contamination, re-infestation or substitution following treatment being completed,
- the stamping of cartons following fumigation with an identifying mark to show it has been performed.

4.5. Packinghouses

Packinghouses registered under the New Zealand BQA system must ensure the following:

- must only source fruits from growers registered for the New Zealand programmes,
- must be able to identify and keep segregated all New Zealand produce from any other produce,

Strawberry Pests and Weed Seeds Lists continued

Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)
Pennisetum alopecuroides (Chinese pennisetum)
Pennisetum macrourum (African feather grass)
Pennisetum polstachyon (mission grass)
Phragmites spp.
Solanum elaeagnifolium (silver leaf nightshade)
Sorghum x alnum (Columbus grass)
Sorghum halapense (Johnson grass)
Tribulus spp. (caltrop)
Xanthium spp (except *X. spinosum*) (burr)

C. Non-quarantine Organisms

Teleogryllus commodus (black field cricket)
Trialeurodes vaporariorum (greenhouse whitefly)
Coccus hesperidum (soft brown scale)
Thrips imiginis (plague thrips)
Heloithis armigera (tomato fruit worm)
Heliothis punctiger (budworm)
Spodoptera litura (tropical armyworm)
Heteronychus arator (black beetle)
Asynonychus cervinus (Fuller's rose weevil)
Desiantha diversipes (Victoria weevil)
Graphognathus leucoloma (white fringed weevil)
Listroderes difficilis (vegetable weevil)
Otiorhynchus rugosostriatus (rough strawberry weevil)
Otiorhynchus sulcatus (black vine weevil)
Phlyctinus callosus (garden weevil)
Tarsonemus pallidus (cyclamen mite)
Bryobia rubrioculus (brown mite)
Tetranychus lambi (banana mite)
Tetranychus ludeni (bean mite)
Tetranychus urticae (two-spotted mite)
Blaniulus guttulatus (white millipede)
Helix aspersa (brown garden snail)
Deroceras panaromitatum (brown slug)
Deroceras reticulatum (reticulated slug)
Milax gagates (black keeled slug)

Non-venomous spiders, predatory mites, predatory insects, vinegar flies, fungal rots.

AUSTRALIA - NEW ZEALAND BQA
PEST LIST - TOMATO *Lycopersicon esculentum*

1. MAXIMUM PEST LIMITS (MPLs)

1.1 Quarantine Pests

The following MPLs will apply to listed "pests" in the three categories A through C below:

A. MPL = 5 pests per million units

Bactrocera tryoni (Queensland fruit fly)

Bactrocera neohumeralis (fruit fly)

Ceratitis capitata (Mediterranean fruit fly)

B. MPL = 0.5%, = Nil infested fruits in a 600 unit sample

Aphididae (aphids)

Austroasca viridigrisea (vegetable jassid)

Nysius vinitor (Rutherglen bug)

Dindymus versicolor (harlequin bug)

Leptocoris mitellata (leptocoris bug)

Plautia affinis (green stink bug)

Phthorimea operculella (potato tuber moth)

Atherigona orientalis (muscid fly)

Lamprolonchaea brouniana (metallic green tomato fly)

Epilachna spp. (leaf-eating ladybirds)

Gonocephalum carpentariae (Northern false wireworm)

Seeds

Baccharis halimifolia

Cenchrus spp. (except *C. ciliaris*)

Chondrilla juncea (skeleton weed)

Eragrostis curvula (African love grass)

Lycium spp. (except *L. barbarum*, *L. ferocissimum*) (boxthorn)

Pennisetum alopecuroides (Chinese pennisetum)

Pennisetum macrourum (African feather grass)

Pennisetum polstachyon (mission grass)

Phragmites spp.

Solanum elaeagnifolium (silver leaf nightshade)

Sorghum x almum (Columbus grass)

Sorghum halapense (Johnson grass)

Tribulus spp. (caltrop)

Xanthium spp (except *X. spinosum*) (burr)

Tomato Pests and Weed Seeds Lists continued**C. Non-quarantine Organisms***Teleogryllus commodus* (black field cricket)*Trialeurodes vaporariorum* (greenhouse whitefly)*Nezara viridula* (green vegetable bug)*Thrips tabaci* (onion thrips)*Heliothis armigera* (tomato fruitworm)*Heliothis punctiger* (budworm)*Spodoptera litura* (tropical armyworm)*Agrotis ipsilon* (cutworm)*Chrysodeixis eriosoma* (green looper)*Heteronychus arator* (black beetle)*Graphognathus leucoloma* (white fringed weevil)*Listroderes difficilis* (vegetable weevil)*Aculops lycopersici* (tomato russet mite)*Tetranychus urticae* (two-spotted mite)

Non-venomous spiders, predatory mites, predatory insects, vinegar flies, fungal rots.

2.1.

PEST LISTS

QUARANTINE PESTS AND WEED SEEDS

CATEGORY - "B"

The following pests (including weed seeds) will require action (e.g. fumigation, sorting, reshipment, destruction) if they exceed the MPL during on arrival inspection in New Zealand. To obtain a confidence level of 95% that the MPL of 0.5% will not be exceeded, this means in a:

450 unit sample - Nil units with live infestation
 600 " " " " " " "
 950 " " - less than 2 live infested fruits
 1250 " " - less than 3 live infested fruits

PESTS

Scientific Name	Common Name	Exceptions
<i>Amblypelta lutescens lutescens</i>	Banana Spotting bug	-
<i>Aonidiella orientalis</i>	Oriental Scale	-
<i>Aphididae spp all</i> <small>Family Aphididae</small>	Aphids	<i>Eriosoma lanigerum</i>
<i>Apomecyna histrio</i> <small>Not in list</small>	Cucurbit Stemborer	-
<i>Atherigona orientalis</i>	Muscid fly	-
<i>Austroasca viridigrisea</i>	Vegetable jassid	-
<i>Brevipalpus lewisi</i>	Bunch mite	-
<i>Cryptorhynchus mangiferae</i>	Mango seed weevil	-
<i>Chrysomelidae (spp all)</i>	Leaf eating beetles	-
<i>Family Chrysomelidae</i>	Pitted apple beetle	<i>Gelopectera porosa</i>
<i>Not in list</i>	Soldier beetle	<i>Chauliognathus lugubris</i>
	Green scarab	<i>Diphucephala sp.</i>
<i>Colgaroides acuminata</i>	Mango flatid	-
<i>Cryptoblabes gnidiella</i>	Pyralid moth	-
<i>Curculionidae (spp all)</i> <small>Not in list</small>	Weevils white fringed weevil	<i>Grophognathus leucoloma</i>
<i>Should be family Curculionidae</i>	Fullers Rose weevil	<i>Asynonychus cervinus</i>
	Spotted vegetable weevil	<i>Desiantha diversipes</i>
	Black vine or Strawberry weevil	<i>Otiorynchus sulcatus</i>
	garden weevil	<i>Phlyctinus callosus</i>
		<i>Sitona discoideus</i>
<i>Dichocrocis punctiferalis</i>	Yellowpeach moth	-
<i>Dindymus versicolor</i>	Harlequin bug	-
<i>Gonocephalum carpontaria</i>	Northern false wire-worm	-
<i>Henosepilachna spp</i>	leaf eating ladybirds	-
<i>Lamprolonchaea spp</i>	Lonchaeid flies	-
<i>Lepidoptera (spp all)</i>	Caterpillars	
<i>Should be Order Lepidoptera</i>	Tomato fruit worm	<i>Heliothus armigera</i>
<i>Not in list</i>	Looper	<i>Chrysodeixis eriosoma</i>

	Cluster caterpillar	<i>Spodoptera litura</i>
	Cut worm	<i>Diarsia intermixta</i>
	Codling moth	<i>Cydia pomonella</i>
	Oriental fruit moth	<i>Cydia molesta</i>
<i>Leptocoris mitellatus</i>	Leptocoris bug	-
<i>Nysius vinitor</i>	Rutherglen bug	-
<i>Orosius argentatus</i>	Brown leaf hopper	-
<i>Pemphigidae</i>	Aphid	-
<i>Phthorimaea operculella</i>	Potato tuber moth	-
Phytophagous spp. all	Mites	Citrus red mite
<i>Plautia affinis</i>	Green stink bug	-
<i>Pseudococcidae spp. all</i>	Mealy bugs	
<i>Dismicoccus brevipes</i>	Mealy bugs	
<i>Corozococcus arecea</i>		
<i>Planococcus citri</i>	Mealy bugs	
	Scarab beetles	<i>Heteronychus orator</i> (black beetle)
<i>Scales Coccidae spp.</i>	Scale	Citrus red scale
<i>Diaspididae spp.</i>	Scale	-
<i>Selenothrips rubrocinctus</i>	Red banded thrips	-

NOTES

Mango Seed Weevil

The quarantine pest Mango Seed Weevil (*Cryptothynchus mangiferae*) must be actively monitored and controlled in orchard management. Detailed records must be kept by the registered growers of mangoes to show crops are not infested with this pest. AQIS inspectors will not cut sound fruits during inspection specifically for this pest. Unsound fruit or fruits suspected of having some type of quarantine pest will be cut for identification in the normal course of inspection, should such inspection reveal MSW then the property/block will be suspended from the New Zealand trade for that season.

Citrus Red Scale

Research has established that the waxing and hot air drying of citrus fruits infested with citrus red scale, that this process effectively kills the scale. Whilst at the time of inspection it will be difficult to determine if the scale is alive or dead inspectors can assume that 95% of scale observed during inspection will be dead if the fruit has been subjected to the waxing and drying processes.

Atherigona orientalis

Research has established that EDB treatment for fruit fly will also effectively kill eggs of *Atherigona orientalis*. Inspectors noting evidence of *Atherigona* eggs on capsicum and cucurbit crops can assume that EDB treatment will effectively kill the eggs and unless there are large numbers present (more than 10 affected units) in the inspection sample, are not to reject produce for *Atherigona orientalis*.

This tolerance is only applicable to consignments that will be subject to fumigation with EDB.

New Zealand MAF will reject if on arrival inspection they detect live eggs of *Atherigona orientalis*

Quarantine Weed Seeds

Weed seed infestation is a particular problem to some commodities under the BQA. Crops such as table grapes, capsicums and cucurbits must be closely monitored to keep these weed seeds out of product and for all other commodities, growers should be alert to large build up of such weeds and endeavour to prevent severe infestations.

BOTANICAL NAME	COMMON NAME	EXCEPTIONS
Baccharis spp	Groundsel Bush	
Cenchrus spp. examples	Spiny Burrgrass	
	Innocent Weed	
	Gentle Annie	
	Gallon's Curse	
	Hillside Burrgrass	
	Buffel Grass	
Chodrilla juncea	Skeleton Weed	
Cyperus spp. examples		
<i>C. Bifax</i>	Downs Nut Grass	
<i>C. Bulbosus</i>	Nalgoo	
<i>C. Difformis</i>	Dirty Dora / Rice Sedge	
<i>C. Polystachyos</i>	Bunchy Sedge	
<i>C. Sphaeroides</i>	Kyllinga Weed	
<i>C. Tenuiflorus</i>	Scaly Sedge	
<i>C. Vaginatus</i>	Stiffleaf Sedge	
Exceptions;		
<i>C. Brevifloius</i>		Mullumbimby Couch
<i>C. Eragrostis</i>		Umbrella Sedge
<i>C. Esculentus</i>		Yellow Nut Grass/Tigernut Sedge
<i>C. Rotundus</i>		Nut Grass
Datura spp. examples		
<i>D. Candida</i>	Angels Trumpet	
<i>D. Innoxia</i>	Downy Thornapple	
<i>D. Leichhardtii</i>	Native Thornapple	
Exceptions		
<i>D. Stramonium</i>		Common Thornapple
<i>D. Ferox</i>		Fierce Thornapple/ Longspine Thornapple
<i>Eragrostis curvula</i>	African Love Grass	
Lycium spp. examples		
<i>L. Australe</i>	Australian Boxthorn	
Exceptions		
<i>L. Barbarum</i>		Chinese Boxthorn
<i>L. Ferocissium</i>		African Boxthorn
<i>Pennisetum alopecuroides</i>	Swamp Foxtail	
<i>Pennisetum Macrourum</i>	African Feather Grass	
Phragmites spp. examples		
<i>P. Australis</i> (syn <i>Communis</i>)	Common Reed	

<i>P. Karka</i>	Tropical Weed	
<i>Solanum Elaeagnifolium</i>	Silver Nightshade/ White Horse Nettle	
<i>Sorghum Almum</i>	Columbus Grass	
<i>Sorghum Halepense</i>	Johnson Grass	
<i>Tribulus</i> spp. (examples)		
<i>T. Occidentalis</i>	Perrenial Caltrop	
<i>T. Terrestris</i>	Caltrop	
<i>Xanthium</i> spp. (examples)		
<i>X. Orientale</i>	Californian Burr	
<i>X. Pungens</i>	Noogoora Burr	
Exceptions		
<i>X. Spinosum</i>		Bathurst Burr

Diseases

Sun Blotch Virus (Avocado)

Black Spot (Guignardia citricarpa) *Malus*

NOTE

Sun Blotch Viroid (Avocado) will be controlled within the industry and the ANVAS tree Registration Scheme. Growers who are part of this scheme are the only growers who will be permitted access to the New Zealand market and these growers must identify and keep segregated, registered fruits from all other fruits whilst the fruit is being packed, stored and transported.

2.2. INJURIOUS PESTS - CATEGORY "C" - UNLIMITED TOLERANCE NON - QUARANTINE PESTS

Scientific name	Common name
<i>Alternaria</i> spp.	
<i>Aleyrodidae</i>	white flies
<i>Asynonychus ceruinus</i>	Fullers Rose weevil
<i>Bryobia rubrioculus</i>	mite
<i>Caliroa cerasi</i>	pear/cherry slug
<i>Chrysodeixis eriosoma</i>	green looper
<i>Pananychus citri</i>	Citrus red mite
<i>Coccus hesperidum</i>	soft brown scale
<i>Cydia pomonella</i>	codlin moth
<i>Cydia molesta</i>	oriental fruit moth
<i>Desiantha diversipes</i>	weevil
<i>Diarsia intermixta</i>	caterpillar
<i>Eriosma lanigerum</i>	woolly aphid
<i>Formicidae</i>	ants
<i>Graphognathus leucoloma</i>	white fringed weevil
<i>Heliothus armigera</i>	corn ear worm
<i>Heteronychus arator</i>	black beetle
<i>Lepidosaphes ulmi</i>	apple mussel scale
<i>Nezara uridula</i>	green vegetable bug
<i>Otiorhynchus sulcatus</i>	weevil
<i>Parlatoria pittospori</i>	Mauve pittosporum scale
<i>Panonychus ulmi</i>	European red mite
<i>Phlyetinus callosus</i>	garden weevil
Phytophagous mites	mite
<i>Polyphagotassonemus latus</i>	broad mite
<i>Pseudococcidae</i>	mealy bugs
<i>Pseudococcus longispinus</i>	long tailed mealy bug
<i>Quadraspidiotus perniciosus</i>	San Jose scale

Rots caused by:

- *Colletotrichum*
- *Phytophthora*
- *Botryosphaeria*
- *Phoma*

Scales

- *Coccidae*
- *Diaspididae*
- *Margarodidae*

Sceliodes cordalis
Sitona discoideus
Snails

eggfruit caterpillar
weevil



<i>Spodoptera litura</i>	cluster caterpillar
<i>Stemphyllium solani</i>	
<i>Telgoryllus commodus</i>	blackfield cricket
<i>Tetranychus ludeni</i>	spider mite
<i>Tetranychus urticae</i>	spider mite
<i>Thrips imaginus</i>	plague thrips
<i>Thysanoptera</i>	thrips
<i>Trialeurodes vaporariorum</i>	greenhouse white fly
<i>Typhlocyba frogatti</i>	apple leaf hopper

**CONTAMINANTS CATEGORY "D" - UNLIMITED TOLERANCE
NON - QUARANTINE PESTS**

Spiders	excepting venomous species
Oribatid mites	
vinegar flies	
Predator wasps	
Fungal storage rot	
Mites	excepting phytophagous

3. SYSTEMS OVERVIEW - BQA PRODUCTION FLOW CHARTS

This Manual gives interpretation to and guidance for industry on five different methods which will meet with MAF/AQIS requirements for homogeneity and inspection methodology under the terms of the BQA. These systems are:

1. Grower line 100% end point inspection,
2. Grower line sample end point inspection,
3. Consignment process production sample end point inspection,
4. Consignment process production Certification Assurance Arrangement.
5. Official Trade Sample consignments.

The following pages give flow diagrams of each of these methods as AQIS requires them to be implemented and documented, so as to be able to audit and then certify, that the requirements of New Zealand are being met. The pathways as shown are only to provide guidance to operators. The system details of each section are contained elsewhere in this document.

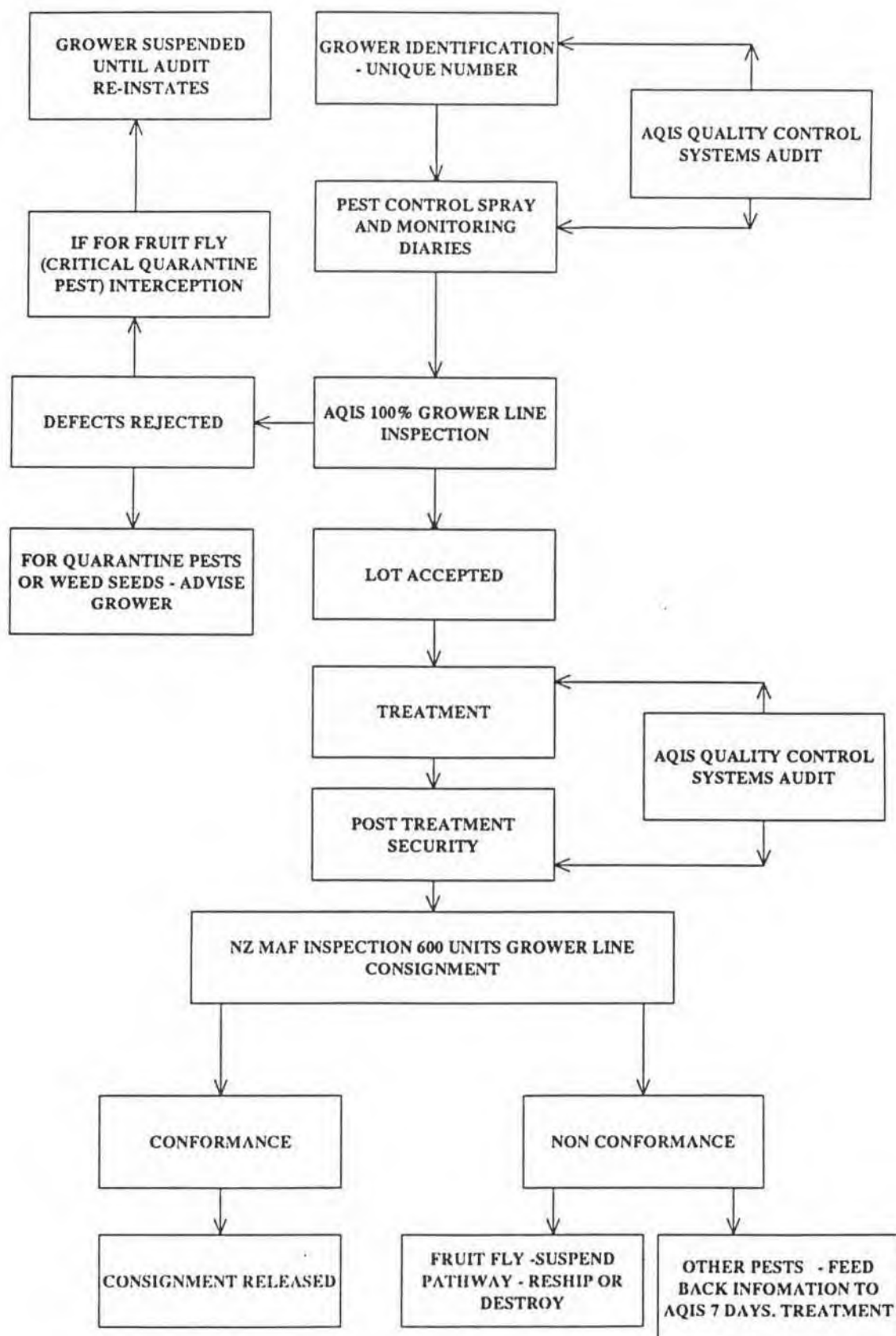
It will be the responsibility of the SSO to record the pathway(s) that each registered grower/crop combination is operating under.

TopChart

Monday, 26 October, 1992

2:53

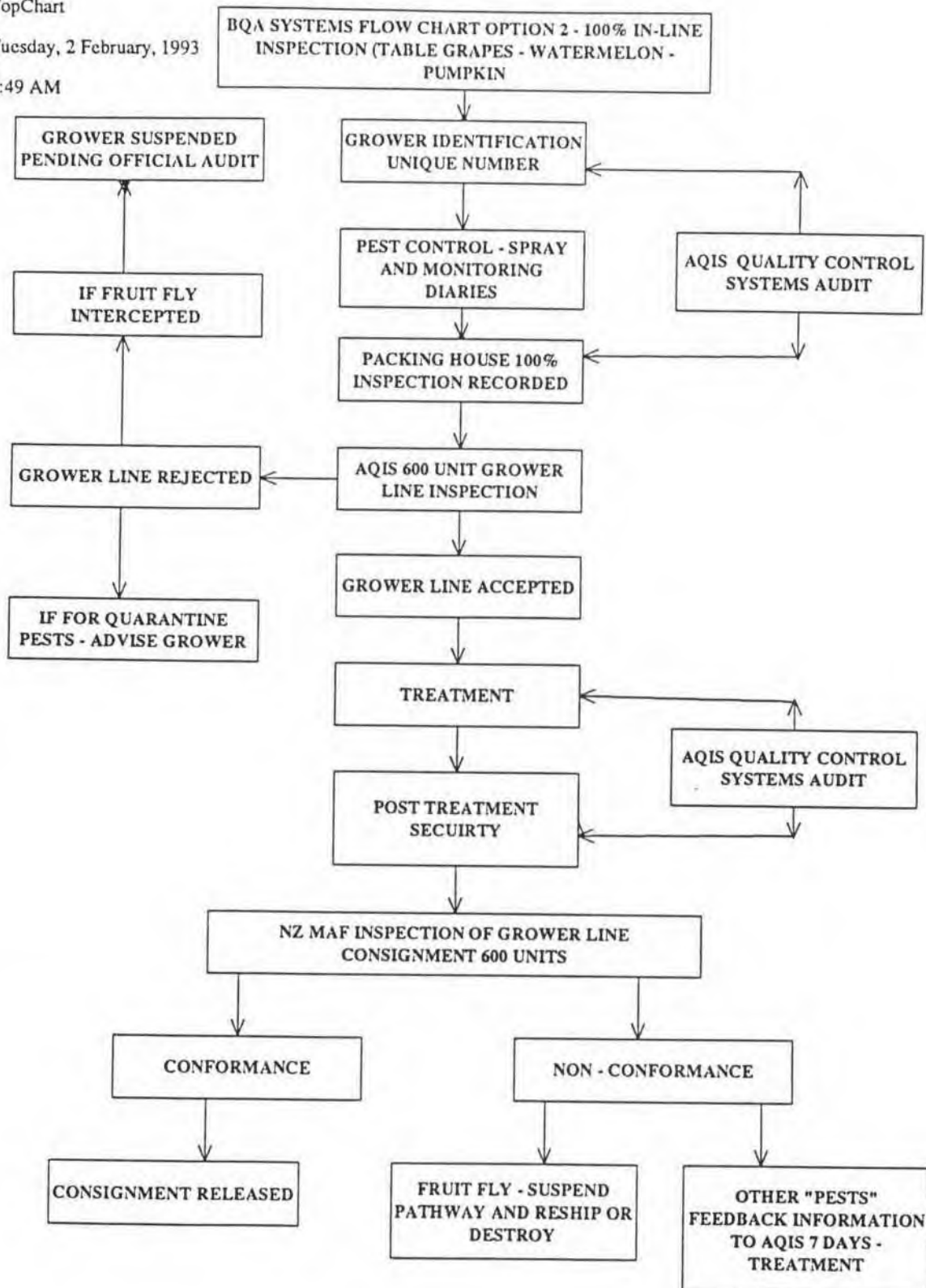
BQA SYSTEMS - FLOW CHART OPTION 1 -
END POINT INSPECTION (100%)



TopChart

Tuesday, 2 February, 1993

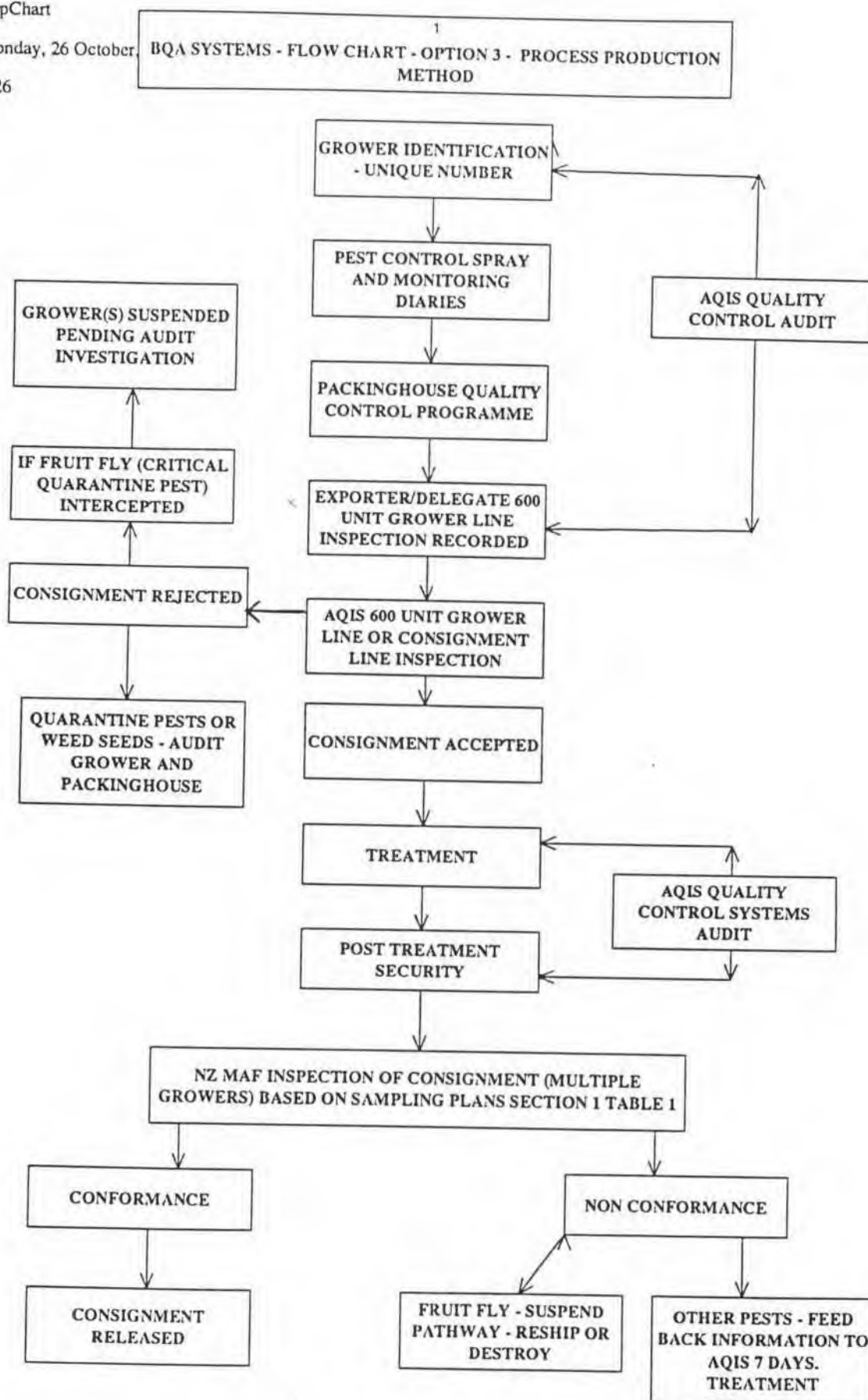
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TopChart

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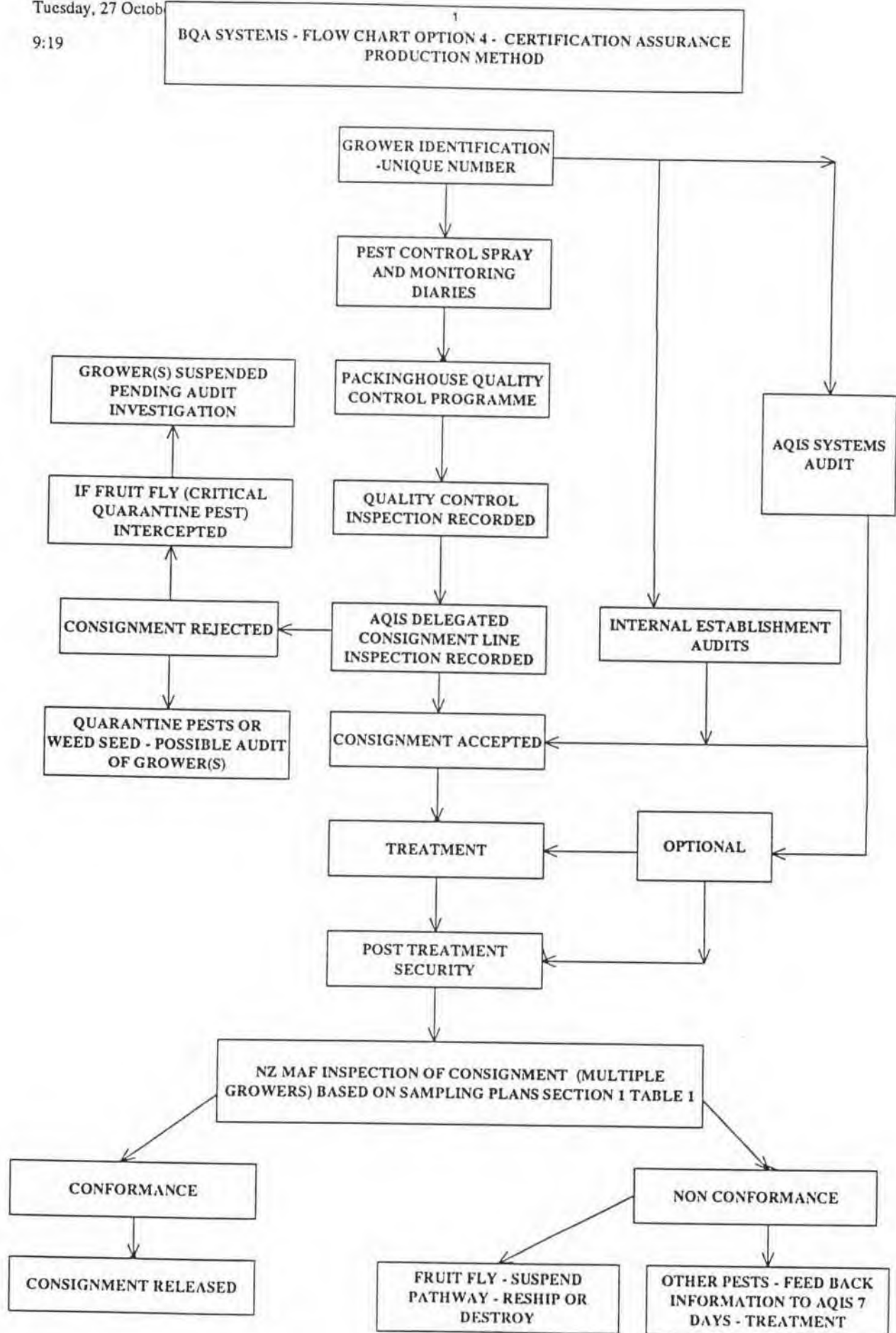
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TopChart

Tuesday, 27 Octob

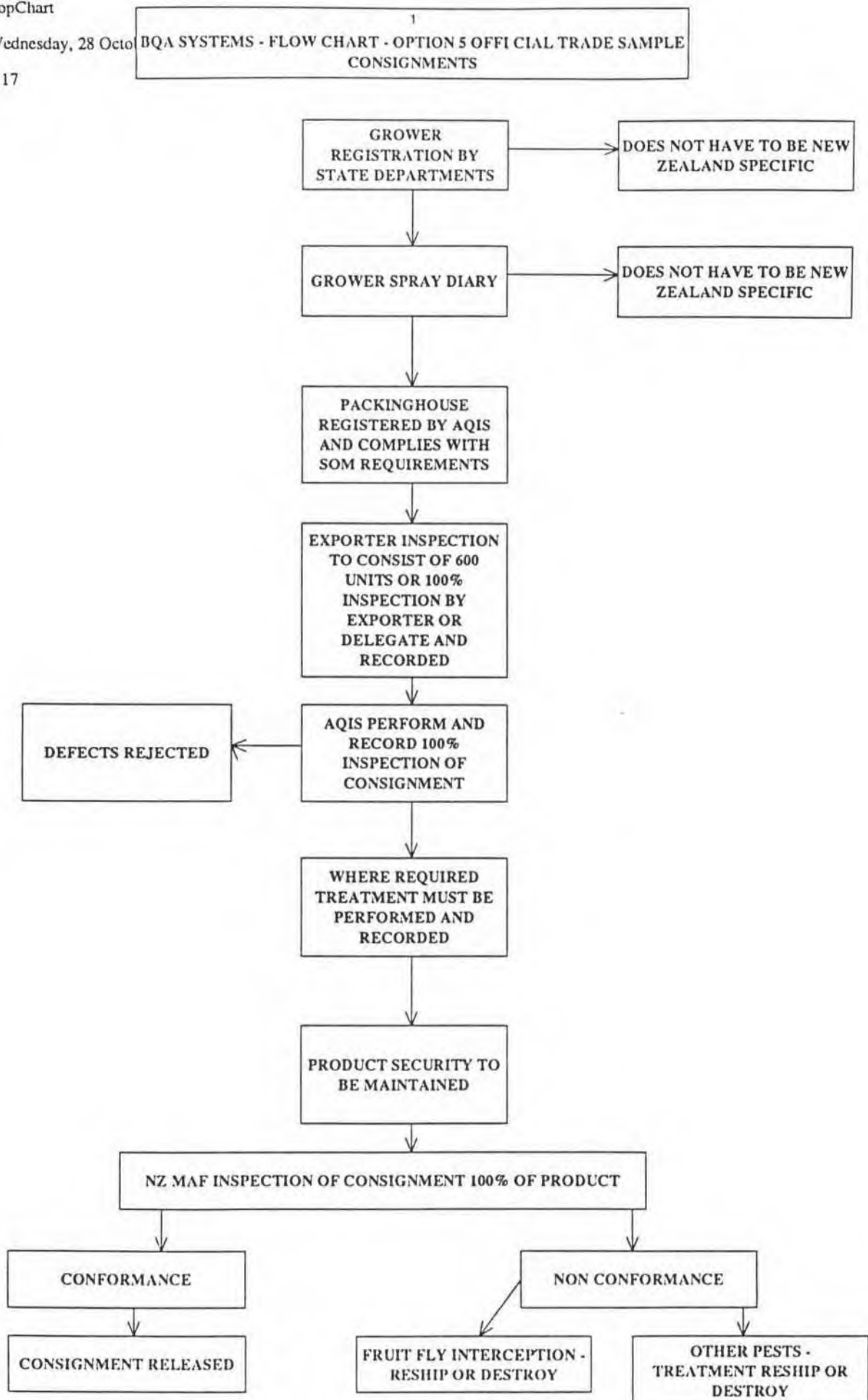
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TopChart

Wednesday, 28 Octo

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4. MANAGEMENT RESPONSIBILITIES

The AQIS organisation structure and management flow chart is attached at the end of this section. This includes the present staff and their position numbers.

4.1. AQIS Central Office

National Manager - Operations will be responsible for ensuring:

- . all components of the BQA Systems Operational Manual are being complied with consistently over all commodities through all States.
- . by delegation to New Zealand Contact Officer, for all normal registered establishments that audits of State Department systems are conducted to ensure compliance with the conditions and requirements of the BQA and that a proper record management system is available.
- . in conjunction with National Manager Quality Management (Plants) that for CA establishments the State Departments are conducting audits of these establishments in accordance with the requirements of QMP - SM - 01.
- . that whenever deficiencies are found in the Systems either at or within the States' responsibilities that these are corrected at the earliest opportunity and are audited to verify that corrective action requests have been implemented.

4.2. State Departments

State Departments through SSO/SI (Exports) are responsible for the following:

- . the daily management and supervision where required of all components of the BQA and the directions given in this Manual,
- . ensure all exporters, treatment centres, packers and growers are meeting the requirements of the BQA and the directions contained in this Manual,
- . ensure inspection staff are trained in the terms, responsibilities and conditions for all BQA commodities from that State that are being exported to New Zealand,
- . ensuring they have registered each pathway and component of the pathways for the commodities being exported through that State,
- . ensure that audits are being conducted at the correct frequency so that measurement of the system and corrective action where required has been effected and that all audit observations are being recorded. It is recommended that the Checklists (Section 6 of this Manual) and the Audit Responsibility and Frequency (Section 7.9.1.) be used as a guide and that the emphasis becomes, "how" do you do this?

4.3. Exporters

Exporters are responsible for the following;

- . that they are sourcing produce from growers and packers who are registered under the terms and conditions of this Manual,
- . must ensure 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 of product,
- . 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,
- . must liaise with State Departments 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.

4.4. Treatment Centres

Treatment centre operators must ensure the following:

- . that all produce to be exported to New Zealand is treated in accordance with the instructions contained in this Manual (Section 5),
- . that produce is able to be identified at all times,
- . records are made and maintained for all treatment performed and to be identified by lots treated,
- . ensure that procedures are in place and carried out to prevent cross contamination , re-infestation or substitution following treatment being completed,
- . the stamping of cartons following fumigation with an identifying mark to show it has been performed.

4.5. Packinghouses

Packinghouses registered under the New Zealand BQA system must ensure the following:

- . must only source fruits from growers registered for the New Zealand programmes,
- . must be able to identify and keep segregated all New Zealand produce from any other produce,
- . maintain security for the New Zealand product at all times whilst it is on the premise,
- . perform and record all inspections performed during the packing process,
- . train staff in identifying quarantine pests of a concern to New Zealand and instruct staff in the responsibilities when packing for New Zealand,
- . operate the packing establishment in a clean and hygienic manner in accordance with the EC(FF&V)O's.

4.3. Exporters

Exporters are responsible for the following;

- that they are sourcing produce from growers and packers who are registered under the terms and conditions of this Manual,
- must ensure 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 of product,
- 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,
- must liaise with State Departments 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.

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Treatment centre operators must ensure the following:

- that all produce to be exported to New Zealand is treated in accordance with the instructions contained in this Manual (Section 5),
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- ensure that procedures are in place and carried out to prevent cross contamination, re-infestation or substitution following treatment being completed,
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 - . perform and record all inspections performed during the packing process,
 - . train staff in identifying quarantine pests of a concern to New Zealand and instruct staff in the responsibilities when packing for New Zealand,
 - . operate the packing establishment in a clean and hygienic manner in accordance with the EC(FF&V)O's.

4.6. Growers - Cucurbits

. Growers registered to grow cucurbits, in addition to the normal conditions for growers which are described in this Manual, are subject to additional requirements under the "Interim Approval" for access of cucurbits into New Zealand.

. Growers will maintain records for each block registered for New Zealand. The records will detail harvesting of each block and the packing procedures for each consignment. Records must be accurate as, should there be a need for MAF or AQIS to traceback to source any pathway involved in dimethoate dipping treatments, unless they can do so, exports of cucurbit commodities from all exporters, packinghouses and growers may be suspended. Section 15 of this Manual gives full details of these requirements.

5. COMMODITIES COVERED AND TREATMENT SCHEDULES

5.1. Commodities Under the BQA

The following products/commodities are covered by the Agreement between AQIS and MAF concerning the importation of host material of harmful fruit fly species (Family Tephritidae) and Quarantine Pests (See Section 2 of this Manual)

Avocados	Hass variety only - product sourced from properties registered under the tree certification scheme for Sun Blotch Viriod under ANVAS.
Banana	
Capsicums	COMMODITY SUSPENDED including chillies, bellpeppers etc. Product can only be sourced from areas declared to be free of fruit flies or from the Eastern States of Australia. Research data has been provided to MAF for <i>Bactrocera tryoni</i> only, therefore areas where Mediterranean fruit fly is known to exist remain prohibited areas until disinfestation research is conducted and accepted by MAF.
Citrus*	including oranges, lemons mandarins etc
Cucurbits	INTERIM APPROVAL ONLY. Fruits can only be sourced from areas declared to be free of fruit flies or from the Eastern States of Australia. Research data has been provided to MAF for <i>Bactrocera tryoni</i> and <i>B. cucumis</i> but not for Mediterranean fruit fly. Until research data is provided and accepted by MAF areas known to be infested by Mediterranean fruit fly must remain prohibited. Includes zucchinis, button squash, honey and rock melons cucumber etc. but excluding pumpkin and other larger varieties of cucurbits. Maximum size for melons is 1.2kg or a melon 22cm long by 45cm circumference.
Eggplant	
Grapes*	
Mangoes*	Commodity Suspended: Awaiting Approved Treatments
Papaya(Papaw)*	Commodity Suspended: Awaiting Approved Treatments

-
- . maintain security for the New Zealand product at all times whilst it is on the premise,
 - . perform and record all inspections performed during the packing process,
 - . train staff in identifying quarantine pests of a concern to New Zealand and instruct staff in the responsibilities when packing for New Zealand,
 - . operate the packing establishment in a clean and hygienic manner in accordance with the EC(FF&V)O's.

4.6. Growers - Cucurbits

- . Growers registered to grow cucurbits, in addition to the normal conditions for growers which are described in this Manual, are subject to additional requirements under the "Interim Approval" for access of cucurbits into New Zealand.
- . Growers will maintain records for each block registered for New Zealand which will detail harvesting and packing procedures for each consignment should there be a need for MAF or AQIS to traceback to source any pathway involved in dimethoate dipping treatments. Section 15 of this Manual gives full details of these requirements.

AQIS - CURRENT POSITION HOLDERS

POSITION NUMBER	SECTION	HOLDER OF POSITION
10906	Operations	s. 22(1)(a)(ii)
13903	Operations New Zealand Contact Officer	
10910	Operations	
13901	Quality Management	
13900	Quality Management	
13911	Quality Management	
11113	Quality Management	
10915	Quality Management	

The current Senior Inspectors are:

STATE	NAME	WHERE LOCATED
Queensland	s. 22(1)(a)(ii)	Brisbane
New South Wales		Sydney
Victoria		Melbourne
Tasmania		Hobart
South Australia		Adelaide
Western Australia		Perth
Northern Territory		Darwin

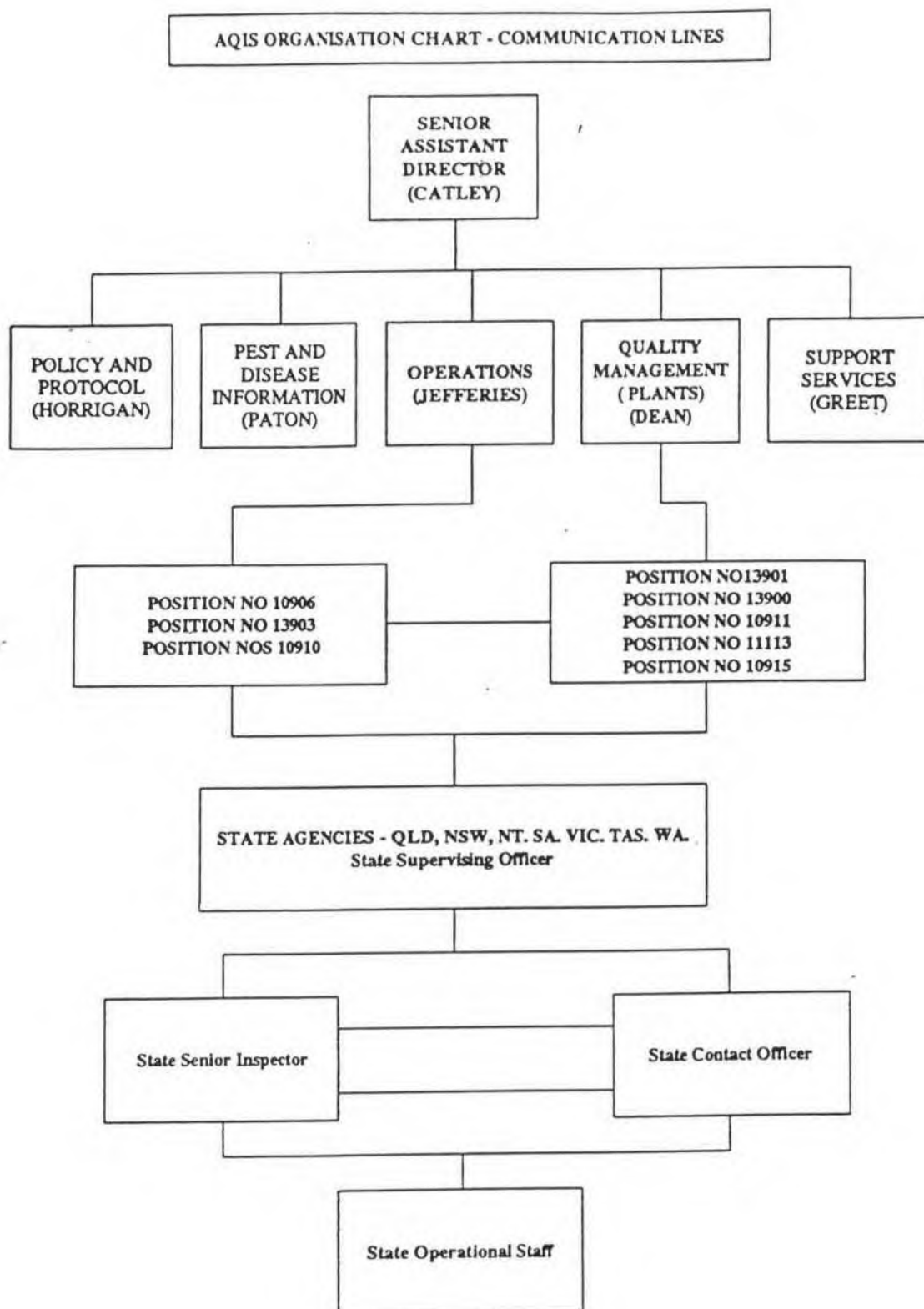
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AQIS - CURRENT POSITION HOLDERS

POSITION NUMBER	SECTION	HOLDER OF POSITION
10906	Operations	s. 22(1)(a)(ii)
13903 ✓	Operations New Zealand Contact Officer	
10930 ✓ "c" 10910 PO "	Operations	
13901	Quality Management	
13900	Quality Management	
13911	Quality Management	
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10915	Quality Management	

The current Senior Inspectors are:

STATE	NAME	WHERE LOCATED
Queensland	s. 22(1)(a)(ii)	Brisbane
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Victoria		Melbourne
Tasmania		Hobart
South Australia		Adelaide
Western Australia		Perth
Northern Territory		Darwin



5. COMMODITIES COVERED AND TREATMENT SCHEDULES

5.1. Commodities Under the BQA

The following products/commodities are covered by the Agreement between AQIS and MAF concerning the importation of host material of harmful fruit fly species (Family Tephritidae) and Quarantine Pests (See Section 2 of this Manual)

Avocados	Hass variety only - product sourced from properties registered under the tree certification scheme for Sun Blotch Viriod under ANVAS.
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Banana

Capsicums	<p>COMMODITY SUSPENDED including chillies, bellpeppers etc. Product can only be sourced from areas declared to be free of fruit flies or from the Eastern States of Australia. Research data has been provided to MAF for <i>Bactrocera tryoni</i> only, therefore areas where Mediterranean fruit fly is known to exist remain prohibited areas until disinfestation research is conducted and accepted by MAF.</p>
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Citrus*	including oranges, lemons mandarins etc
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Cucurbits	<p>INTERIM APPROVAL ONLY. Fruits can only be sourced from areas declared to be free of fruit flies or from the Eastern States of Australia. Research data has been provided to MAF for <i>Bactrocera tryoni</i> and <i>B. cucumis</i> but not for Mediterranean fruit fly. Until research data is provided and accepted by MAF areas known to be infested by Mediterranean fruit fly must remain prohibited.</p>
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Includes zucchinis, button squash, honey and rock melons cucumber etc. but excluding pumpkin and other larger varieties of cucurbits. Maximum size for melons is 1.2kg or a melon 22cm long by 45cm circumference.

Eggplant

Grapes*

Mangoes*	Commodity Suspended: Awaiting Approved Treatments
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Papaya(Papaw)*	Commodity Suspended: Awaiting Approved Treatments
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5. COMMODITIES COVERED AND TREATMENT SCHEDULES

5.1. Commodities Under the BQA

The following products/commodities are covered by the Agreement between AQIS and MAF concerning the importation of host material of harmful fruit fly species (Family Tephritidae) and Quarantine Pests (See Section 2 of this Manual)

Avocados	Approval Pending Treatment Verification - 'Hass' variety only are permitted
Banana	
Capsicums	including chillies, bellpeppers etc. Commodity Suspended
Citrus*	including oranges, lemons mandarins etc
Cucurbits	including zucchinis, button squash, honey and rock melons cucumber etc. but excluding pumpkin and other larger varieties of cucurbits. Maximum size for melons is 1.2kg or a melon 22cm long by 45cm circumference.
Grapes*	
Mangoes*	Commodity Suspended: Awaiting Approved Treatments
Papaya(Papaw)*	Commodity Suspended: Awaiting Approved Treatments
Pineapple	
Pome fruits*	including apples, pears, nashi, quinces etc.
Stonefruits	including peaches, plums, nectarines,apricots, cherries etc.
Strawberries*	NOTE: Commodity can only be sourced from areas free of Queensland Fruit Fly
Tomatoes*	

* Fruits marked such are permitted 2 dead Critical Quarantine Pests in a 600 unit sample, 4 dead Critical Quarantine Pests in a 950 unit sample and 6 dead Critical quarantine Pests in a 1250 unit sample.

Avocado, Cucurbits and Capsicums are permitted 1 dead harmful fruit fly species in a 950 sample and 2 dead harmful fruit fly species in a sample of 1250.

Pineapple

Pome fruits* including apples, pears, nashi, quinces etc.

Pomegranate Sourced from declared area freedom regions only.

Stonefruits including peaches, plums, nectarines, apricots, cherries etc.

NOTE: Commodity can only be sourced from areas free of Queensland Fruit Fly

Strawberries*

Tomatoes*

* Fruits marked such are permitted 2 dead Critical Quarantine Pests in a 600 unit sample, 4 dead Critical Quarantine Pests in a 950 unit sample and 6 dead Critical quarantine Pests in a 1250 unit sample.

Avocado, Cucurbits and Capsicums are permitted 1 dead harmful fruit fly species in a 950 sample and 2 dead harmful fruit fly species in a sample of 1250.

All fruits that are inspected within Australia and found to contain live or dead fruit fly species will be rejected immediately and an audit of the pathway to that point will be conducted and charged for under the Fee for Service rates.

NOTE 1

Should fruit be intercepted with fruit fly contamination on arrival in New Zealand, and that fruit had been supplied from an area free of fruit fly, area freedom will be suspended immediately and the consignment, plus any others in transit from that area, will be rejected on arrival.

NOTE 2

Other commodities may be added to the approved BQA, as these crops become commercially attractive for export to New Zealand. As Pest Lists and procedures are developed and agreed between AQIS/ MAF and the industries concerned they will be included in this Manual. The basic management requirements are not expected to be any different for these crops than those already covered for the existing products.

NOTE 3**RESTRICTIONS ON TOMATO VARIETIES**

Prior to the commencement of the export season growers in areas in which fruit flies are present, will sign a declaration of intent to the effect that only tomatoes of the varieties Floradade, Hayslip, Tristar, Sunny and Duke, (as dimethoate disinfestation research has been carried out on these varieties only), will be grown and shipped for the New Zealand market.

Growers in fruit fly areas who are not packing their own fruits, shall supply with every delivery of tomatoes for export to New Zealand to the packinghouse, a declaration stating the variety of tomatoes.

In fruit fly free areas there are no restrictions to the tomato varieties that can be grown and exported to New Zealand.

NOTE 4

STONEFRUITS - POMEGRANATE

Stonefruits can only be sourced from fruit fly area freedom locations. As no treatments against fruit fly are established this is the only permitted pathway for access to New Zealand.

NOTE 5

CUCURBITS - WATERMELONS

Watermelons equal in volume and smaller than the variety known as "Candy Red" maybe exported to New Zealand but only after undergoing a methyl bromide fumigation treatment in accordance with the treatment sections of this Manual.

5.2. Approved Treatment Schedules

5.2.1. Area Freedom

Area freedom is a recognised treatment under the terms of the BQA.

Unless an outbreak of fruit fly is current, areas considered to be free of fruit flies are Tasmania, the Riverland District of South Australia, the Sunraysia Districts of Victoria and New South Wales and the Murrumbidgee Irrigation Area of New South Wales.

NOTE: Inspectors should not assume that these areas are fruit fly free as the status of these areas could change very quickly and without their being notified. Inspectors performing AQIS inspections of fruits and vegetables in areas outside those areas nominated above but, of the "area freedom" origin, should confirm the status of fruit fly freedom with the authorities in the growing area, prior to issuing any phytosanitary certificates.

AQIS (New Zealand Contact Officer) will notify any changes to area freedom to MAF immediately they are known.

For produce originating from areas with fruit flies, treatment can be either physical or chemical and the approved treatments are listed here-under.

Additional information for area freedom and the treatments in the case of an out break are contained in Section 8 of this Manual.

All fruits that are inspected within Australia and found to contain live or dead fruit fly species will be rejected immediately and an audit of the pathway to that point will be conducted and charged for under the Fee for Service rates.

NOTE 1

Should fruit be intercepted with fruit fly contamination on arrival in New Zealand, and that fruit had been supplied from an area free of fruit fly, area freedom will be suspended immediately and the consignment, plus any others in transit from that area, will be rejected on arrival.

NOTE 2

Other commodities may be added to the approved BQA, as these crops become commercially attractive for export to New Zealand. As Pest Lists and procedures are developed and agreed between AQIS/ MAF and the industries concerned they will be included in this Manual. The basic management requirements are not expected to be any different for these crops than those already covered for the existing products.

NOTE 3**RESTRICTIONS ON TOMATO VARIETIES**

Prior to the commencement of the export season growers in areas in which fruit flies are present will sign a declaration of intent to the effect that only tomatoes of the varieties Floradade, Hayslip, Tristar, Sunny and Duke will be grown and shipped for the New Zealand market.

Growers in fruit fly areas who are not packing their own fruits, shall supply with every delivery of tomatoes for export to New Zealand to the packinghouse, a declaration stating the variety of tomatoes.

In fruit fly free areas there are no restrictions to the tomato varieties that can be grown.

NOTE 4**STONEFRUITS**

Stonefruits can only be sourced from fruit fly area freedom locations. As no treatments against fruit fly are established this is the only permitted pathway for access to New Zealand.

Growers in fruit fly areas who are not packing their own fruits, shall supply with every delivery of tomatoes for export to New Zealand to the packinghouse, a declaration stating the variety of tomatoes.

In fruit fly free areas there are no restrictions to the tomato varieties that can be grown and exported to New Zealand.

NOTE 4

STONEFRUITS AND POMEGRANATE

Stonefruits and pomegranate can only be sourced from fruit fly area freedom locations. As no treatments against fruit fly are established this is the only permitted pathway for access to New Zealand.

NOTE 5

CUCURBITS - WATERMELONS

Watermelons equal in volume and smaller than the variety known as "Candy Red" maybe exported to New Zealand but only after undergoing a methyl bromide fumigation treatment in accordance with the treatment sections of this Manual.

5.2. Approved Treatment Schedules

5.2.1. Area Freedom

Area freedom is a recognised treatment under the terms of the BQA. Please refer to Section 8 for the criteria for area freedom, declaration of an outbreak etc.

Unless an outbreak of fruit fly is current, areas considered to be free of fruit flies are Tasmania, the Riverland District of South Australia, the Sunraysia Districts of Victoria and New South Wales and the Murrumbidgee Irrigation Area of New South Wales.

NOTE: Inspectors should not assume that these areas are fruit fly free as the status of these areas could change very quickly and without them being notified. Inspectors performing AQIS inspections of fruits and vegetables in areas outside those areas nominated above but, of the "area freedom" origin, should confirm the status of fruit fly freedom with the authorities in the growing area, prior to issuing any phytosanitary certificates.

AQIS (New Zealand Contact Officer) will notify any changes to area freedom to MAF immediately they are known.

For produce originating from areas with fruit flies, treatment can be either physical or chemical and the approved treatments are listed here-under.

Additional information for area freedom and the treatments in the case of an outbreak are contained in Section 8 of this Manual.

5.2.2. Fumigation

All chambers/tents that are used for ethylene dibromide or methyl bromide fumigation will be checked at least twice annually by a recognized State Department authority to ensure efficacy of the scheduled treatments. All approval certificates for these tests will be held on file and be available for audit purposes.

Records of all disinfestation treatments will be maintained as per Appendix 8.

For the purposes of this Manual the treatment of produce with ethylene dibromide (EDB) has been withdrawn for all commodities other than eggplant. New Zealand Ministry of Health has imposed a maximum residue level for EDB of 0.1 ppm. on all fresh fruits and vegetables being imported into New Zealand.

It is believed that there is the possibility of citrus fruits being able to meet these conditions after a period of forced air ventilation, however until research work is conducted and research data approved by MAF and New Zealand Ministry of Health, then treatment with EDB is effectively not permitted.

Establishments conducting either ethylene dibromide or methyl bromide fumigation will ensure thermometers are checked for accuracy at weekly intervals (using the ice slurry method or similar approved method), and, records will be made showing dates of calibration checks with the results for each thermometer that the establishment has on the premises. Thermometers showing deviations from the standard will be marked in a reasonably permanent manner showing the error of deviation from the standard and the date that the calibration was made. Inspectors are to ensure that compliance is being undertaken in establishments calibration methods.

Thermometers which show signs of air bubbles within the measuring cylinder must not be used for temperature recording of New Zealand intended produce.

The measurement of temperatures for product which has been subject to chiller or cool storage prior to fumigation being undertaken regardless, of whether product has been allowed to warm or not, will be taken from product at the inside centre of the pallet approximately two thirds of the way down the pallet.

The pallet should be broken down to allow this temperature to be gained. The inserting of a probe thermometer through a carton/box at about this point, is not considered to be satisfactory and will not be accepted by AQIS officers as being a true reading for the consignments as a whole.

The probe must be inserted into the core of the fruit/vegetable as treatment is based of flesh temperatures.

Fruits/vegetables that are packed within a polythene or plastic type bag must be fully opened with the bags pulled down over the outside of the carton before being placed into fumigation

treatment chamber/tents. Efficacy of fumigation treatment has been known to be severely impeded by the use of impermeable bags.

Where it is a State requirement, all operators of fumigation chambers/tents will be licensed to carry out chemical fumigation by the appropriate State Authority and such licences will be current and made available for inspection/audit.

Product packaging is to be stamped after fumigation is completed on as many packages as can be stamped without breaking down the pallet, with the word "fumigated" and a "date" of treatment.

5.2.3.1. Methyl Bromide Fumigation

Strawberries

Fruits will be at a minimum of 15°C and will be subjected to a dose rate of 48 grams per cubic metre for 3 hours at a loading of not greater than 50%.

Watermelon

Methyl bromide fumigation treatment is only permitted for watermelon equal to or smaller than the variety known as "Candy Red".

Fruits will be fumigated for two hours at atmospheric pressure at one of the following rates:

<u>Temperature</u>	<u>g/m³</u>
26-32 °C	24
21-26 °C	32
15-21 °C	40
10-15 °C	48

5.2.3.2. Ethylene Dibromide (EDB) Fumigation

EDB fumigation is permitted for Eggplant. Fruit will be fumigated for two hours at atmospheric pressure at one of the following rates:

Temperature	Dose Rate	Time
10°C to 14.9°C	33g/m ³	2 hours
15°C to 19.9°C	29g/m ³	2 hours
20°C and above	22g/m ³	2 hours

All fumigations are to be conducted with a maximum loading of 50% of volume of the tents/chamber.

5.2.4. Dimethoate Treatments for Tomatoes and Cucurbits

Tomatoes

For tomatoes which are grown in areas that are not free of fruit flies, either of the following treatments must be applied for the varieties Floradade, Hayslip, Tristar, Sunny and Duke. No other varieties have been approved for dimethoate treatments.

Two dimethoate treatments are approved for use on tomatoes only:

- (a) Dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum of one minute or
- (b) Flood spraying with a solution of dimethoate 400 ppm active ingredient at a flow rate of 16 litres per minute per square metre on a conveyor moving at 0.5 metres/minute. Fruit must not be handled for at least one minute after spraying (ie it must remain wet).

Cucurbits

For cucurbits with a volume surface area equal to and smaller than Rockmelons, (size 1.2kg or 22cm long by 40cm circumference), a dimethoate dip (full immersion), in a solution of dimethoate with 400 ppm active ingredient for 1 minute is required.

In all instances, the insecticide solutions are to be freshly prepared immediately prior to use.

All washing of fruits will be completed before the disinfestation treatment.

The disinfestation treatments should be the final operation before packing.

Packinghouses must nominate a person who is to be responsible for both the making up and recording of solution strengths. Should the dimethoate tank be added to during the course of the daily operations, the time, amount of chemical together with volume of water added, must be recorded.

AQIS inspection staff must ensure that dimethoate strengths are being recorded whenever the solution is being prepared.

Tomatoes and cucurbits being consigned to Brisbane, Townsville or Cairns for export loading must have "Declaration of Treatment" Appendix 12 to the Systems Operational Manual attached forwarded with the consignment for sighting by the inspector issuing the phytosanitary certificate.

5.2.5. Cold disinfestation

The following fruits have been approved for cold storage disinfestation procedures, Avocado, Citrus, Grapes and Pome fruits.

s. 22(1)(a)(ii)

AUSTRALIA-NEW ZEALAND - BILATERAL QUARANTINE ARRANGEMENT

SYSTEMS OPERATIONAL MANUAL

Summary of contents

- Controlled copies of this Manual: Distribution List
- Amendment record summary
- Glossary of terms and abbreviations
- Definitions
- 1. **Introduction**
 - 1.1 Scope of Manual
 - 1.2.1 Pest Categories
 - 1.3. Maximum Pest Limits (MPL's)
- 2.1. Pest Lists - Quarantine Pests and Weed Seeds
- 2.2. Pest Lists - Non-quarantine Pests
- 3. **BQA Production systems - Flow Chart**
- 4. **Management Responsibilities**
 - 4.1. AQIS Central Office
 - 4.2. State Departments
 - 4.3. Exporters
 - 4.4. Treatment Centres
 - 4.5. Packinghouses
 - 4.6. Growers - cucurbits
- 5. **Crop Schedules and Treatment Schedules**
 - 5.1. Commodities for BQA
 - 5.2. Approved Treatment Schedules
 - 5.2.1. Area Freedom
 - 5.2.2. Fumigation General Requirements
 - 5.2.3. Fumigation (Methyl Bromide - Strawberries)
 - 5.2.4. Dimethoate - Tomatoes
 - 5.2.5. Cold Storage Disinfestation
 - 5.2.6. Treatment Bananas - Dimethoate
 - 5.2.7. Interim Approved Treatment - Dimethoate Dips for Cucurbits
 - 5.3.1. Treatment Monitoring - Fumigation
 - 5.3.2. Treatment Monitoring - Cold sterilization
 - 5.3.3. Cold Sterilization - Sensor Placement
 - 5.3.4. Cold Storage - Temperature Recording
 - 5.3.5. Treatment Record Requirements

Commodities covered and Treatment Schedules

Citrus, Grapes and Pome fruits will be subjected to a core temperature of 1° C plus or minus 0.6° C for 16 days. or 0°C or below for not less than 13 days.

Following a hot benomyl dip (see Section 5.2.7.), avocado will be subjected to a core temperature of 1°C plus or minus 0.2°C for a minimum period of 16 days.

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.

A minimum of three sensors/probes, 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.

All sensors/probes will be calibrated prior to, and at the completion of any treatment being undertaken, using the ice slurry or any other approved method. All sensors/probes will be marked in a reasonably permanent manner showing any deviation from zero in any calibrations undertaken. These calibrations will be entered into a log book whenever they are checked and these records will be made available to an AQIS officer upon request.

For operators of Controlled Atmosphere Cool Stores (Pome Fruits), records must be available which detail 16 continuous days of treatment at 1°C plus or minus 0.6°C or 13 continuous days of treatment of 0°C or below during the storage period.

Operational and recording requirements that are required under the terms of the BQA are listed in the Operational Manual in Section 5.3.(2 - 5.). This section will be read and complied with at all times.

5.2.6 Treatment for Bananas - Dimethoate

Bananas being forwarded to New Zealand can only be shipped in a hard green condition.

Fruits at time of inspection will satisfy this criteria before any Exporter, Exporter delegatee or AQIS inspection is carried out.

Bananas will be dipped in a dimethoate solution at 500 ppm active ingredient for 30 seconds at a minimum flesh temperature of 18° C.

Dimethoate solutions must be made up immediately prior to their use, and the solution topped up and/or changed regularly to maintain the concentration of dimethoate.

Packinghouses must nominate a person who is responsible for making up and recording of dimethoate solution strengths. The nominee must also calibrate thermometers weekly (using the ice slurry or similarly approved method), whilst in operation, and record the results on file. Any variations to the standards, will be recorded in a permanent manner on the thermometer itself. The nominee will take the flesh temperatures of fruit making up each lot to be treated and record these temperatures.

Temperature recordings and dimethoate solution strengths can be recorded using one form per consignment lot being treated.

AQIS inspection staff will ensure that calibration of equipment, temperature recording and dimethoate dipping strengths are being recorded and placed on file.

Bananas being consigned to Brisbane, Cairns or Townsville for export to New Zealand must have a Declaration of Treatment - Appendix 12 to this Manual, forwarded with the consignment for sighting by the inspector issuing the phytosanitary certificate.

This treatment must be included in the treatment section of the Phytosanitary Certificate for each consignment being forwarded to New Zealand.

5.2.7. Avocado Treatment - Benomyl Dip and Cold Storage - 'Hass' Variety

'Hass' avocado will be dipped for a minimum of 3 minutes in 0.05% benomyl at 46°C, dried for two hours at ambient temperatures and then stored at 1°C for a minimum of 16 days.

DIPPING PROCEDURES

In all instances, the insecticide solutions are to be freshly prepared immediately prior to use.

All washing of fruits will be completed before the benomyl treatment.

The benomyl treatments should be the final operation before packing.

Packinghouses must nominate a person who is to be responsible for both the making up and recording of solution strengths. Should the benomyl dipping tank be added to during the course of the daily operations, the time, amount of chemical together with volume of water added, must be recorded.

AQIS inspection staff must ensure that benomyl strengths are being recorded whenever the solution is being prepared.

Avocados being consigned for export loading to Brisbane, Townsville or Cairns from treatment centres remote from these ports, must have "Declaration of Treatment" Appendix 12 to the Systems Operational Manual forwarded with the consignment for sighting by the inspector issuing the phytosanitary certificate.

COLD STORAGE DISINFESTATION - AVOCADO

Sections 5.2.5. and Sections 5.3.2. to 5.3.4. inclusive detail the requirements and the recording that needs to be undertaken for the cold disinfestation treatment of avocado being exported to New Zealand.

5.3. TREATMENT - RECORDS AUDITS AND MONITORING

All fumigation and treatment schedules to be applied to fruits and vegetables covered by this Manual will be in accordance with the requirements and conditions stipulated in Sections 5.2.2. to 5.2.7. inclusive of this Manual.

AQIS inspection staff will monitor/supervise the efficacy of all treatments in accordance with Circular Memorandum 1993/25 issued May 1993. The fumigation operator must advise AQIS area office of intended treatments giving at least 4 hours notice but may commence treatment procedures if granted permission to do so by the local area office.

AQIS will conduct audits of fumigation treatment centres monthly during the operating season. Should deficiencies, requiring immediate corrective action be detected, the treatment centre will not be permitted to undertake fumigation treatments unless an AQIS authorised officer is in attendance at the commencement of each treatment. All audit/supervision time is chargeable to the treatment centre involved.

5.3.1 Fumigation

Fumigation records detailing all aspects of the treatment must be accurately maintained for each treatment. Temperature of produce, dosage rates, fumigation times and venting times must be clearly recorded along with the amounts per grower line or packinghouse line by commodity type.

Fumigation records must be made available to authorized AQIS officers when requested.

5.3.2. Cold Sterilization Disinfestation

A 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.

5.3.3. Sensor Placement

Thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and easily 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 load. Cartons will be fully closed following insertion of the sensors.

5.3.4. Temperature Recording

- Continuous - Strip charts or data log sheets will be held for each cold treatment

- Intermittent -Sensor temperatures will be recorded twice daily (morning and afternoon) for each day of the cold treatment and verified once every 4 days by an AQIS authorized 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 inspector will initiate the treatment when the treatment chamber has stabilised at the required temperature. When cold disinfestation treatment is completed, the records covering the treatment will be copied with one copy being retained by the treatment facility and the second copy to be given to the AQIS inspector who signs that the treatment has been satisfactorily undertaken.

5.3.5. 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 and quantity by lots involved, by Packinghouse and the Exporter.
- Date the pulp temperature initially recorded $1^{\circ}\text{C} \pm 0.6^{\circ}$ (or for avocado $1^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$) and the date treatment concluded or date the pulp temperature chamber recorded 13 days at 0° or below.
- Records of a.m. and p.m. temperatures within the chamber on a daily basis throughout the treatment programme.
- Date produce was cleared from chamber with details of despatch and post treatment security of produce.
- Date and results of calibration of sensors.

5.4. Certification Assurance Arrangements for Fumigation/Cold Storage

This section is an option that AQIS/MAF may offer to industry to replace the requirement of AQIS inspectors monitoring/auditing of coolstores, fumigation and dimethoate dipping premises to verify the efficacy of treatments for each consignment assembled for New Zealand.

Where it is proven that operators have a consistent record in providing fumigation, cold storage or dimethoate dipping disinfestation treatments for the New Zealand trade, AQIS would consider entering a certification assurance arrangement, in place of direct inspection and monitoring/auditing of such operators, under the following conditions:

-
- Establishments/premises must provide an Operational Manual to AQIS Canberra detailing how they operate and record their responsibilities under the BQA.
 - Fumigators must have current licence from the appropriate agency to operate methyl bromide fumigations.
 - Fumigation chambers/tents must have current registration from the appropriate agency
 - The Manual must include details of:
 - how the status of produce is identified whilst located on the premise before and after treatment.
 - who is responsible for undertaking calibration checks of all thermometers used in the treatment schedules, the method used and the recording of this information
 - how temperature checks on produce will be performed, and the number of checks
 - what records will be kept identifying, growers packers, quantity and commodity
 - how and what records will be made and kept, detailing all treatment activities
 - detail post treatment security, stamping of produce, storage and insect proofing
 - details of how and what precautions/inspections are made for loading and despatch of product from premises and what records will be kept.

5.5. Post Treatment Security

Immediately following stamping of cartons, produce must be either:

- shrinkwrapped and sealed as a palletised unit.
- shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom
- Coolstored unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and untreated product.
- Coolstored protected as in (i) and (ii) above in secure packages.

Should any treatment operator/packinghouse or freight forwarder wish to vary the above security arrangements to obviate the need for transfer certificates, AQIS would consider entering into a CA arrangement for such on presentation of a company quality control Manual covering the intended operations. Quality Manuals should be forwarded to the Senior Inspector (Exports) in the State involved.

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

- (a) the security of cleared/treated produce whilst on their premises.
- (b) 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.
- (c) documenting all incoming and outgoing produce that is intended to be exported under the related BQA appendices.

The nominated person can be either the exporters delegate or the operator of the fumigation/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 (ie open bins 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 cleared and treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28).

5.6. TREATMENT ENDORSEMENTS

Endorsements required on phytosanitary certificates for treatment details are detailed in Section 14.4. of this Manual.

NOTE 5

CUCURBITS - WATERMELONS

Watermelons equal in volume and smaller than the variety known as "Candy Red" may be exported to New Zealand but only after undergoing a methyl bromide fumigation treatment in accordance with the treatment sections of this Manual.

5.2. Approved Treatment Schedules

5.2.1. Area Freedom

Area freedom is a recognised treatment under the terms of the BQA.

Unless an outbreak of fruit fly is current, areas considered to be free of fruit flies are Tasmania, the Riverland District of South Australia, the Sunraysia Districts of Victoria and New South Wales and the Murrumbidgee Irrigation Area of New South Wales.

NOTE: Inspectors should not assume that these areas are fruit fly free as the status of these areas could change very quickly and without their being notified. Inspectors performing AQIS inspections of fruits and vegetables in areas outside those areas nominated above but of the "area freedom" origin should confirm the status of fruit fly freedom with the authorities in the growing area prior to issuing any phytosanitary certificates.

AQIS (New Zealand Contact Officer) will notify any changes to area freedom to MAF immediately they are known.

For produce originating from areas with fruit flies, treatment can be either physical or chemical and the approved treatments are listed here-under.

Additional information for area freedom and the treatments in the case of an outbreak are contained in Section 8 of this Manual.

5.2.2. Fumigation

All chambers/tents that are used for MB fumigation will be checked at least twice annually by a recognized authority to ensure efficacy of the scheduled treatments. All approval certificates for these tests will be held on file and be available for audit purposes.

Records of all disinfestation treatments will be maintained as per Appendix 8.

For the purposes of this Manual the treatment of produce with ethylene dibromide (EDB) has been withdrawn. New Zealand Ministry of Health has imposed a maximum residue level of 0.1 ppm. on all fresh fruits and vegetables being imported into New Zealand.

It is believed that there is the possibility of citrus fruits being able to meet these conditions after a period of forced air ventilation, however until research work is conducted and research

data approved by MAF and New Zealand Ministry of Health, then treatment with EDB is effectively not permitted.

Establishments conducting methyl bromide fumigation will ensure thermometers are be checked for accuracy at weekly intervals (using the ice slurry method or similar approved method) and records will be made showing dates of calibration checks with the results for each thermometer that the establishment has on the premises. Thermometers showing deviations from the standard will be marked in a reasonably permanent manner showing the error of deviation from the standard and the date that the calibration was made.

The measurement of temperatures for product which has been subject to chiller or cool storage prior to fumigation being undertaken regardless, of whether product has been allowed to warm or not, will be taken from the inside centre of the pallet approximately two thirds of the way down the pallet.

The pallet should be broken down to allow this temperature to be gained. The inserting of a probe thermometer at about this point is not considered to be satisfactory and will not be accepted by AQIS officers as being a true reading.

The probe must be inserted into the core of the fruit/vegetable as treatment is based of flesh temperatures.

Fruits/vegetables that are packed within a polythene or plastic type bag must be fully opened with the bags pulled down over the outside of the carton before being placed into fumigation treatment chamber/tents. Efficacy of fumigation treatment has been known to be severely impeded by the use of impermeable bags.

Where it is a State requirement, all operators of fumigation chambers/tents will be licensed to carry out chemical fumigation by the appropriate State Authority and such licences will be current and made available for inspection/audit.

Product packaging is to be stamped after fumigation is completed on as many packages as can be stamped without breaking down the pallet, with the word "fumigated" and a "date".

5.2.3. Methyl Bromide Fumigation

Strawberries

Fruits will be at a minimum of 15°C and will be subjected to a dose rate of 48 grams per cubic metre for 3 hours at a loading of not greater than 50%.

Watermelon

Methyl bromide fumigation treatment is only permitted for watermelon equal to or smaller than the variety known as "Candy Red".

Fruits will be fumigated for two hours at atmospheric pressure at one of the following rates:

Temperature	g/m ³
26-32 °C	24
21-26 °C	32
15-21 °C	40
10-15 °C	48

5.2.4. Dimethoate Treatments for Tomatoes and Cucurbits

Tomatoes

For tomatoes which are grown in areas that are not free of fruit flies, either of the following treatments must be applied for the varieties Floradade, Hayslip, Tristar, Sunny and Duke. No other variety has been approved for dimethoate treatments.

Two dimethoate treatments are approved for use on tomatoes only:

- Dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum of one minute or
- Flood spraying with a solution of dimethoate 400 ppm active ingredient, ~~at a flow rate of 16 litres per minute per square metre on a conveyor moving at 0.5 metres/minute.~~ Fruit must not be handled for at least one minute after spraying (ie it must remain wet).

Cucurbits

For cucurbits with a volume surface area equal to and smaller than Rockmelons, (size 1.2kg or 22cm long by 40cm circumference), a dimethoate dip (full immersion), in a solution of dimethoate with 400 ppm active ingredient for 1 minute is required.

In all instances, the insecticide solutions are to be freshly prepared immediately prior to use.

All washing of fruits will be completed before the disinfestation treatment.

The disinfestation treatments should be the final operation before packing.

Packinghouses must nominate a person who is to be responsible for both the making up and recording of solution strengths. Should the dimethoate tank be added to during the course of the daily operations, the time, amount of chemical together with volume of water added, must be recorded.

AQIS inspection staff must ensure that dimethoate strengths are being recorded whenever the solution is being prepared.

Tomatoes and cucurbits being consigned to Brisbane, Townsville or Cairns for export loading must have "Declaration of Treatment" Appendix 12 to the Systems Operational Manual attached forwarded with the consignment for sighting by the inspector issuing the phytosanitary certificate.

5.2.5. Cold disinfestation

The following fruits have been approved for cold storage disinfestation procedures, Avocado, Citrus, Grapes and Pome fruits.

Citrus, Grapes and Pome fruits will be subjected to a core temperature of 1° C plus or minus 0.6° C for 16 days. or 0°C or below for not less than 13 days.

Following a hot benomyl dip (see Section 5.2.7.), avocado will be subjected to a core temperature of 1°C plus or minus 0.2°C for a minimum period of 16 days.

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.

A minimum of three sensors/probes, 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.

All sensors/probes will be calibrated prior to and at the completion of any treatment being undertaken using the ice slurry or any other approved method. All sensors/probes will be marked in a reasonably permanent manner showing any deviation from zero in any calibrations undertaken. These calibrations will be entered into a log book whenever they are checked and these records will be made available to an AQIS officer upon request.

For operators of Controlled Atmosphere Cool Stores (Pome Fruits), records must be available which detail 16 continuous days of treatment at 1°C plus or minus 0.6°C or 13 continuous days of treatment of 0°C or below during the CA storage period.

Operational and recording requirements that are required under the terms of the BQA are listed in the Operational Manual in Section 5.3.(2 - 5.). This section will be read and complied with at all times.

5.2.6 Treatment for Bananas - Dimethoate

Bananas being forwarded to New Zealand can only be shipped in a hard green condition.

Fruits at time of inspection will satisfy this criteria before any Exporter, Exporter delegatee or AQIS inspection is carried out.

Bananas will be dipped in a dimethoate solution at 500 ppm active ingredient for 30 seconds at a minimum flesh temperature of 18° C.

Dimethoate solutions must be made up immediately prior to their use, and the solution topped up and/or changed regularly to maintain the concentration of dimethoate.

Packinghouses must nominate a person who is responsible for making up and recording of dimethoate solution strengths. The nominee must also calibrate thermometers weekly (using the ice slurry or similarly approved method) whilst in operation and record the results on file. Any variations to the standards, will be recorded in a permanent manner on the thermometer itself. The nominee will take the flesh temperatures of fruit making up each lot to be treated and record these temperatures.

Temperature recordings and dimethoate solution strengths can be recorded using one form per consignment lot being treated.

AQIS inspection staff will ensure that calibration of equipment, temperature recording and dimethoate dipping strengths are being recorded and placed on file.

Bananas being consigned to Brisbane, Cairns or Townsville for export to New Zealand must have a Declaration of Treatment - Appendix 12 to this Manual, forwarded with the consignment for sighting by the inspector issuing the phytosanitary certificate.

This treatment must be included in the treatment section of the Phytosanitary Certificate for each consignment being forwarded to New Zealand.

5.2.7. Avocado Treatment - Benomyl Dip and Cold Storage - 'Hass' Variety

'Hass' avocado will be dipped for a minimum of 3 minutes in 0.05% benomyl at 46°C, dried for two hours at ambient temperatures and then stored at 1°C for a minimum of 16 days.

DIPPING PROCEDURES

In all instances, the insecticide solutions are to be freshly prepared immediately prior to use.

All washing of fruits will be completed before the benomyl treatment.

The benomyl treatments should be the final operation before packing.

Packinghouses must nominate a person who is to be responsible for both the making up and recording of solution strengths. Should the benomyl tank be added to during the course of the daily operations, the time, amount of chemical together with volume of water added, must be recorded.

AQIS inspection staff must ensure that benomyl strengths are being recorded whenever the solution is being prepared.

Avocados being consigned for export loading to Brisbane, Townsville or Cairns from treatment centres remote from these ports, must have "Declaration of Treatment" Appendix 12 to the Systems Operational Manual forwarded with the consignment for sighting by the inspector issuing the phytosanitary certificate.

COLD STORAGE DISINFESTATION - AVOCADO

Sections 5.2.5. and Sections 5.3.2. to 5.3.4. inclusive detail the requirements and the recording that needs to be undertaken for the cold disinfestation treatment of avocado being exported to New Zealand.

5.3. TREATMENT - RECORDS AUDITS AND MONITORING

All fumigation and treatment schedules to be applied to fruits and vegetables covered by this Manual will be in accordance with the requirements and conditions stipulated in Sections 5.2.2. to 5.2.7. inclusive of this Manual.

AQIS inspection staff will monitor/supervise the efficacy of all treatments in accordance with Circular Memorandum 1993/25 issued May 1993. The fumigation operator must advise AQIS area office of intended treatments giving at least 4 hours notice but may commence treatment procedures if granted permission to do so by the local area office.

AQIS will conduct audits of fumigation treatment centres monthly during the operating season, should deficiencies requiring immediate corrective action be detected, the treatment centre will not be permitted to undertake fumigation treatments unless an AQIS authorised officer is in attendance at the commencement of treatment. All audit/supervision time is chargeable to the treatment centre involved.

5.3.1 Fumigation

Fumigation records detailing all aspects of the treatment must be accurately maintained for each treatment. Temperature of produce, dosage rates, fumigation times and venting times must be clearly recorded along with the amounts per grower line or packinghouse line by commodity type.

Fumigation records must be made available to authorized AQIS officers when requested.

5.3.2. Cold Sterilization Disinfestation

A 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.

5.3.3. Sensor Placement

Thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and easily 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 load. Cartons will be fully closed following insertion of the sensors.

5.3.4. Temperature Recording

- Continuous - Strip charts or data log sheets will be held for each cold treatment
- Intermittent - Sensor temperatures will be recorded twice daily (morning and afternoon) for each day of the cold treatment and verified once every 4 days by an AQIS authorized 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 inspector will initiate the treatment when the treatment chamber has stabilised at the required temperature. When cold disinfestation treatment is completed, the records covering the treatment will be copied with one copy being retained by the treatment facility and the second copy to be given to the AQIS inspector who signs that the treatment has been satisfactorily undertaken.

5.3.5. 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 and quantity by lots involved, by Packinghouse and the Exporter.
- Date the pulp temperature initially recorded $1^{\circ}\text{C} \pm 0.6^{\circ}$ (or for avocado $1^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$) and the date treatment concluded or date the pulp temperature chamber recorded 13 days at 0° or below.
- Records of a.m. and p.m. temperatures within the chamber on a daily basis throughout the treatment programme.
- Date produce was cleared from chamber with details of despatch and post treatment security of produce.
- Date and results of calibration of sensors.

5.4. Certification Assurance Arrangements for Fumigation/Cold Storage

This section is an option that AQIS/MAF may offer to industry to replace the requirement of AQIS inspectors monitoring/auditing of coolstores, fumigation and dimethoate dipping premises to verify the efficacy of treatments for each consignment assembled for New Zealand.

Where it is proven that operators have a consistent record in providing fumigation, cold storage or dimethoate dipping disinfestation treatments for the New Zealand trade, AQIS would consider entering a certification assurance arrangement in place of direct inspection and monitoring/auditing of such operators under the following conditions:

- Establishments/premises must provide an Operational Manual to AQIS Canberra detailing how they operate and record their responsibilities under the BQA.
- Fumigators must have current licence from the appropriate agency to operate methyl bromide fumigations.
- Fumigation chambers/tents must have current registration from the appropriate agency
- The Manual must include details of:
 - how the status of produce is identified whilst located on the premise before and after treatment.
 - who is responsible for undertaking calibration checks of all thermometers used in the treatment schedules, the method used and the recording of this information
 - how temperature checks on produce will be performed, and the number of checks
 - what records will be kept identifying, growers packers, quantity and commodity
 - how and what records will be made and kept, detailing all treatment activities
 - detail post treatment security, stamping of produce, storage and insect proofing
 - details of how and what precautions/inspections are made for loading and despatch of product from premises and what records will be kept.

5.5. Post Treatment Security

Immediately following stamping of cartons, produce must be either:

- shrinkwrapped and sealed as a palletised unit.
- shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom
- Coolstored unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and untreated product.
- Coolstored protected as in (i) and (ii) above in secure packages.

Commodities covered and Treatment Schedules

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

- (a) the security of cleared/treated produce whilst on their premises.
- (b) 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.
- (c) documenting all incoming and outgoing produce that is intended to be exported under the related BQA appendices.

The nominated person can be either the exporters delegate or the operator of the fumigation/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 (ie open bins 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 cleared and treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28).

5.6. TREATMENT ENDORSEMENTS

Endorsements required on phytosanitary certificates for treatment details are detailed in Section 14.4. of this Manual.

5. COMMODITIES COVERED AND TREATMENT SCHEDULES

5.1. Commodities Under the BQA

The following products/commodities are covered by the Agreement between AQIS and MAF concerning the importation of host material of harmful fruit fly species (Family Tephritidae) and Quarantine Pests (See Section 2 of this Manual)

Capsicums	including chillies, bellpeppers etc.
Cucurbits	including zucchinis, squash, melons cucumber pumpkin etc.
Citrus*	including oranges, lemons mandarins etc.
Strawberries*	
Grapes*	
Tomatoes*	
Mangoes*	
Papaya(Papaw)*	
Pome fruits*	including apples, pears, nashi, quinces etc.
Avocados	

* Fruits marked such are permitted 2 dead Critical Quarantine Pests in a 600 unit sample, 4 dead Critical Quarantine Pests in a 950 unit sample and 6 dead Critical quarantine Pests in a 1250 unit sample.

Avocado, Cucurbits and Capsicums are permitted 1 dead harmful fruit fly species in a 950 sample and 2 dead harmful fruit fly species in a sample of 1250.

All fruits that are inspected within Australia and found to contain live or dead fruit fly species will be rejected immediately and an audit of the pathway to that point will be conducted and charged for under the Fee for Service rates.

NOTE 1

Should fruit be intercepted with fruit fly contamination on arrival in New Zealand, and that fruit had been supplied from an area free of fruit fly, area freedom will be suspended immediately and the consignment, plus any others in transit from that area, will be rejected on arrival.

NOTE 2

Pineapples, Bananas, Lychee, Eggplant and Persimmons may be added to the approved BQA during 1993 and these crops will be included in this Manual for operating requirements as the industries agree to adopt the measures required by the BQA agreement for Fruit Flies. The basic management requirements are not expected to be any different for these crops than those already covered for the existing products.

NOTE 3

RESTRICTIONS ON TOMATO VARIETIES

Prior to the commencement of the export season growers in areas in which fruit flies are present will sign a declaration of intent to the effect that only tomatoes of the varieties Floradade, Hayslip, Tristar, Sunny and Duke will be grown and shipped for the New Zealand market.

Growers in fruit fly areas who are not packing their own fruits shall supply with every delivery of tomatoes for export to New Zealand to the packinghouse, a declaration stating the variety of tomatoes.

In fruit fly free areas there are no restrictions to the varieties that can be grown.

5.2. Approved Treatment Schedules

5.2.1. Area Freedom

Area freedom is a recognised treatment under the terms of the BQA.

Unless an outbreak of fruit fly is current, areas considered to be free of fruit flies are Tasmania, the Riverland District of South Australia, the Sunraysia Districts of Victoria and New South Wales and the Murrumbidgee Irrigation Area of New South Wales.

NOTE: Inspectors should not assume that these areas are fruit fly free as the status of these areas could change very quickly and without their being notified. Inspectors performing AQIS inspections of fruits and vegetables in areas outside those areas nominated above but of the "area freedom" origin should confirm the status of fruit fly freedom with the authorities in the growing area prior to issuing any phytosanitary certificates.

AQIS (New Zealand Contact Officer) will notify any changes to area freedom to MAF immediately they are known.

For produce originating from areas with fruit flies, treatment can be either physical or chemical and the approved treatments are listed here-under.

Additional information for area freedom and the treatments in the case of an out break are contained in Section 8 of this Manual.

5.2.2. Fumigation

All chambers/tents that are used for EDB or MB fumigation will be checked at least twice annually by a recognized authority to ensure efficacy of the scheduled treatments. All approval certificates for these tests will be held on file and be available for audit purposes.

BQA requirements are for a maximum loading of 50% of volume of the fumigation tents/chambers for fumigation with *Ethylene Dibromide* (EDB). The following temperature/rate/times are required for each commodity. Records of all disinfestations will be maintained as per Appendix 8.

TABLE 3
EDB TREATMENT

	Capsicum-Cucurbit	
	Mango-Avocado	
	<u>Pawpaw/Papaya</u>	<u>Citrus</u>
<u>Time</u>	2 hours	2 hours
<u>Temp (Pulp)</u>	<u>Dose</u>	<u>Dose</u>
12 - 15°C	33g/m ³	-
10 - 15.5°C	-	32g/m ³
16 - 19°C	29g/m ³	-
15.6 - 21°C	-	25g/m ³
20°C and over	22g/m ³	-
21.1°C and over	-	18g/m ³

For mixed commodity/temperature fumigations where produce cannot be brought to a common range of temperature, the lowest temperature recorded across the chamber loading will be used to determine the dosage rate that must be applied.

Thermometers will be checked for accuracy at weekly intervals (using the ice slurry method or similar approved method) and records will be made showing dates of calibration checks with the results for each thermometer that the establishment has on the premises. Thermometers showing deviations from the standard will be marked in a reasonably permanent manner showing the error of deviation from the standard and the date that the calibration was made.

The measurement of temperatures for product which has been subject to chiller or cool storage prior to fumigation being undertaken regardless, of whether product has been allowed to warm or not, will be taken from the inside centre of the pallet approximately two thirds of the way down the pallet. The pallet should be broken down to allow this temperature to be gained. The inserting of a probe thermometer at about this point is not considered to be satisfactory and will not be accepted by AQIS officers as being a true reading.

Fruits/vegetables that are packed within a polythene or plastic type bag must be fully opened with the bags pulled down over the outside of the carton before being placed into fumigation

treatment chamber/tents. Efficacy of fumigation treatment has been known to be severely impeded by the use of impermeable bags.

Where it is a State requirement, all operators of fumigation chambers/tents will be licensed to carry out EDB fumigation by the appropriate State Authority and such licences will be current and made available for inspection/audit.

Records will be kept detailing each fumigation treatment and will be similar in content and format as set out in Appendix 8.

Product packaging is to be stamped after fumigation is completed on as many packages as can be stamped without breaking down the pallet, with the word "fumigated" and a "date"..

5.2.3. Methyl Bromide for Strawberries

Fruits will be at a minimum of 15⁰C and will be subjected to a dose rate of 48 grams per cubic metre for 3 hours at a loading of not greater than 50%.

5.2.4. Dimethoate for Tomatoes

For tomatoes which are grown in areas that are not free of fruit flies, either of the following treatments must be applied for the varieties Floradade, Hayslip, Tristar, Sunny and Duke. No other variety has been approved for dimethoate treatments.

Two dimethoate treatments are approved for use on tomatoes only:

- (a) Dipping in a solution of dimethoate with 400 ppm active ingredient for a minimum of one minute or
- (b) Flood spraying with a solution of dimethoate 400 ppm active ingredient at a flow rate of 16 litres per minute per square metre on a conveyor moving at 0.5 metres/minute. Fruit must not be handled for at least one minute after spraying (ie it must remain wet).

In both instances, the insecticide solutions are to be freshly prepared immediately prior to use.

All washing of fruits will be completed before the disinfestation treatment.

The disinfestation treatments should be the final operation before packing.

Packinghouses must nominate a person who is to be responsible for both the making up and recording of solution strengths. Should the dimethoate tank be added to during the course of the daily operations, the time, amount of chemical together with volume of water added, will be recorded.

AQIS inspection staff must ensure that dimethoate strengths are being recorded whenever the solution is being prepared.

Tomatoes being consigned to Brisbane, Townsville or Cairns for export loading must have "Declaration of Treatment" Appendix 13 to the Systems Operational Manual attached forwarded with the consignment for sighting by the inspector issuing the phytosanitary certificate.

5.2.5. Cold disinfestation

The following fruits have been approved for cold storage disinfestation procedures, Citrus, Grapes and Pome fruits.

Fruit will be subjected to a core temperature of 1° C plus or minus 0.6° C for 16 days. or 0°C or below for not less than 13 days.

Cold Storage premises used for cold disinfestation treatments will be registered by AQIS as an approved premise for treating/storing such fruits/vegetables.

A minimum of three sensors/probes, 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.

All sensors/probes will be calibrated prior to and at the completion of any treatment being undertaken using the ice slurry or any other approved method. All sensors/probes will be marked in a reasonably permanent manner showing any deviation from zero in any calibrations undertaken. These calibrations will be entered into a log book whenever they are checked and these records will be made available to an AQIS officer upon request.

Operational and recording requirements that are required under the terms of the BQA are listed in the Operational Manual in Section 5.3.(2 - 5.). This section will be read and complied with at all times.

5.3. TREATMENT - RECORDS AUDITS AND MONITORING

All fumigation and treatment schedules to be applied to fruits and vegetables covered by this Manual will be in accordance with the requirements and conditions stipulated in Sections 5.2.2. to 5.2.5. inclusive of this Manual.

AQIS inspection staff will monitor/supervise the efficacy of all treatments in accordance with Circular Memorandum 1993/25 issued May 1993. The fumigation operator must advise AQIS area office of intended treatments giving at least 4 hours notice but may commence treatment procedures if granted permission to do so by the local area office.

AQIS will conduct audits of fumigation treatment centres monthly during the operating season, should deficiencies requiring immediate corrective action be detected, the treatment centre will not be permitted to undertake fumigation treatments unless an AQIS authorised officer is in attendance at the commencement of treatment. All audit/supervision time is chargeable to the treatment centre involved.

5.3.1 Fumigation

Fumigation records detailing all aspects of the treatment must be accurately maintained for each treatment. Temperature of produce, dosage rates, fumigation times and venting times must be clearly recorded along with the amounts per grower line or packinghouse line by commodity type.

Fumigation records must be made available to authorized AQIS officers when requested.

5.3.2.. Cold Sterilization Disinfestation

A 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.

5.3.3. Sensor Placement

Thermometers and sensors will be checked and calibrated prior to and immediately following treatment with results recorded and easily 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 load. Cartons will be fully closed following insertion of the sensors.

5.3.4. Temperature Recording

- Continuous - Strip charts or data log sheets will be held for each cold treatment
- Intermittent - Sensor temperatures will be recorded twice daily (morning and afternoon) for each day of the cold treatment and verified once every 4 days by an AQIS authorized 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 inspector will initiate the treatment when the temperature has stabilised at the required temperature and will sign off the print out at the conclusion of 13 or 16 days depending on the treatment temperatures being undertaken. Under these conditions there will be no requirement for formal monitoring of temperatures by AQIS in the intervening period. The print out record must be able to identify lots/packers/growers for each treatment covered.

When cold disinfestation treatment is completed, the records covering the treatment will be copied with one copy being retained by the treatment facility and the second copy to be given to the AQIS inspector who signs that the treatment has been satisfactorily undertaken.

5.3.5. 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 and quantity by lots involved, by Packinghouse and the Exporter.
- Date the pulp temperature initially recorded $1^{\circ}\text{C} \pm 0.6^{\circ}$ and the date treatment concluded or date the pulp temperature chamber recorded 13 days at 0° or below.

- Records of a.m. and p.m. temperatures within the chamber on a daily basis throughout the treatment programme.
- Date produce was cleared from chamber with details of despatch and post treatment security of produce.
- Date and results of calibration of sensors.

5.4. Certification Assurance Arrangements for Fumigation/Cold Storage

This section is an option that AQIS/MAF may offer to industry to replace the requirement of AQIS inspectors monitoring/auditing of coolstores, fumigation and dimethoate dipping premises to verify the efficacy of treatments for each consignment assembled for New Zealand.

Where it is proven that operators have a consistent record in providing fumigation, cold storage or dimethoate dipping disinfestation treatments for the New Zealand trade, AQIS would consider entering a certification assurance arrangement in place of direct inspection and monitoring/auditing of such operators under the following conditions:

- Establishments/premises must provide an Operational Manual to AQIS Canberra detailing how they operate and record their responsibilities under the BQA.
- Fumigators must have current licence from the appropriate agency to operate EDB fumigations.
- Fumigation chambers/tents must have current registration from the appropriate agency
- The Manual must include details of:
 - how 50% chamber loading is calculated
 - how the status of produce is identified whilst located on the premise before and after treatment.
 - who is responsible for undertaking calibration checks of all thermometers used in the treatment schedules, the method used and the recording of this information
 - how temperature checks on produce will be performed, and the number of checks
 - what records will be kept identifying, growers packers, quantity and commodity
 - how and what records will be made and kept, detailing all treatment activities
 - detail post treatment security, stamping of produce, storage and insect proofing
 - details of how and what precautions/inspections are made for loading and despatch of product from premises and what records will be kept.

5.5. Post Treatment Security

Immediately following stamping of cartons, produce must be either:

- shrinkwrapped and sealed as a palletised unit.
- shadecloth/cheese-cloth types mesh bag, covering entire contents of the pallet and closed securely at the bottom
- Coolstored unprotected, at temperatures up to 5°C with a minimum of 1 metre between fumigated/treated produce and untreated product.
- Coolstored protected as in (i) and (ii) above in secure packages.

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

- (a) the security of cleared/treated produce whilst on their premises.
- (b) 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.
- (c) documenting all incoming and outgoing produce that is intended to be exported under the related BQA appendices.

The nominated person can be either the exporters delegate or the operator of the fumigation/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 (ie open bins 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 cleared and treated product will be included on Transfer Certificate (Ex 186) or Notice of Intention to Export/Export Permit (Ex 28).

5.6. TREATMENT ENDORSEMENTS

Endorsements required on phytosanitary certificates for treatment details are detailed in Section 14.4. of this Manual.

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6.1. PRELUDE TO QUALITY SYSTEMS - COMPONENT RESPONSIBILITIES

6.1.1. GROWER CHECKLIST

The following questions are designed to ensure that growers are fully aware of their responsibilities under the conditions and requirements of the BQA and this Manual.

- | | Yes | No |
|---|-----|-------------------------|
| 1. Do you have a copy of the Australian - New Zealand Bilateral Quarantine Arrangement? (Not mandatory if a grower answers yes to question 2 below). | | |
| 2. Have you got a copy of the Systems Operational Manual (Growers Section 6.2.1.to 6.3.)? | | |
| 3. Are you aware that fruit flies are of a critical quarantine concern to New Zealand and that fruit flies at any stage of life are a prohibited entry into New Zealand.? (Sections 1.1.1 and 1.2.1.) | | |
| 4. Are you aware of the pests/diseases and weed seeds that are of a quarantine concern to New Zealand? (Sections 1.1.2. and 1.2.2.) | | |
| 5. Do you keep a spray control diary for your property? (Section 6.2.3.) | | |
| 6. Do you monitor your property for incidence of pest/disease and do you record your observations in your diary? (Section 6.2.3.) | | If no, go to Question 7 |
| 7. Do you use the services of a field crop monitor/adviser/consultant? (Section 6.3.) | | |
| 8. Is this monitor/adviser/consultant aware that you are wanting to register or have registered your property/crop for the New Zealand BQA requirements? (Section 6.3.) | | |
| 9. Are the chemicals that you are using to control pests and disease on your property all registered for the use that you are applying them? (Section 6.2.2.) | | |

To apply for registration for the New Zealand BQA conditions, you must be able to answer YES to questions 1. 2. 3. 4.(5. and 6. or 7.) 8. 9.

10. In becoming a registered grower for the New Zealand BQA, you must agree to having at least one initial audit and a subsequent follow up audit of your property and your spray control and monitoring diaries in the first year of operation and that in

6.2. QUALITY SYSTEMS FOR NEW ZEALAND PRODUCE AND COMPONENT RESPONSIBILITIES

All produce being packed under the terms of the BQA must be sourced from registered growers and registered packinghouses.

6.2.1. Grower Registration

Cucurbit growers must refer to Section 15 whilst interim arrangements for dimethoate dipping treatments are in place.

AQIS through its State Agencies, accredited CA Packinghouses and Citrus packinghouses will register all growers who intend to produce fruits/vegetables for export to New Zealand.

Citrus growers who wish to register for the New Zealand market will do so with a registered Packinghouse whether this establishment is accredited for CA or not. All Citrus packinghouses must provide to their State Department area office a list of their registered growers prior to the navel or valencia season commencing. Packinghouses will advise of any additions to, or deletions from, that list during the season.

CA and citrus Packinghouses will hold on file all their individual grower "Applications for Registration" and these must be available for inspection by AQIS officers or MAF officials at any time.

All packinghouses affected by the contents of the above paragraph will be responsible for undertaking all grower audit responsibilities in accordance with the direction contained in Section 7.1.

Growers are required to apply for renewal of registration each year or season for each commodity they wish to export to New Zealand.

Growers will make application to join the arrangement by filling out a "Application for Registration" to export to New Zealand (Appendix 1 or 2).

The S.I. Exports, or in the case of a CA arrangement the designated Packinghouse Manager (and for citrus - all Packinghouse Managers) will be responsible for maintaining the grower register for each commodity/season or year. Registration details will include grower name and address, unique number identifier, approved commodities homogeneity pathway(s) and current status (e.g. active and non active).

For all other commodities (and establishments not on CA arrangements with AQIS), growers must make "Applications for Registration" to the local office of the State Department for registration and these will be held on file in local State offices.

Only those growers who are so registered can export products covered by the Arrangement.

6.1. PRELUDE TO QUALITY SYSTEMS - COMPONENT RESPONSIBILITIES

6.1.1. GROWER CHECKLIST

The following questions are designed to ensure that growers are fully aware of their responsibilities under the conditions and requirements of the BQA and this Manual.

- | | Yes | No |
|---|-----|-------------------------|
| 1. Do you have a copy of the Australian - New Zealand Bilateral Quarantine Arrangement? (Not mandatory if a grower answers yes to question 2 below). | | |
| 2. Have you got a copy of the Systems Operational Manual (Growers Section 6.2.1.to 6.3.)? | | |
| 3. Are you aware that fruit flies are of a critical quarantine concern to New Zealand and that fruit flies at any stage of life are a prohibited entry into New Zealand.? (Sections 1.1.1 and 1.2.1.) | | |
| 4. Are you aware of the pests/diseases and weed seeds that are of a quarantine concern to New Zealand? (Sections 1.1.2. and 1.2.2.) | | |
| 5. Do you keep a spray control diary for your property? (Section 6.2.3.) | | If no, go to Question 7 |
| 6. Do you monitor your property for incidence of pest/disease and do you record your observations in your diary? (Section 6.2.3.) | | If no, go to Question 7 |
| 7. Do you use the services of a field crop monitor/adviser/consultant? (Section 6.3.) | | |
| 8. Is this monitor/adviser/consultant aware that you are wanting to register or have registered your property/crop for the New Zealand BQA requirements? (Section 6.3.) | | |
| 9. Are the chemicals that you are using to control pests and disease on your property all registered for the use that you are applying them? (Section 6.2.2.) | | |

To apply for registration for the New Zealand BQA conditions, you must be able to answer YES to questions 1. 2. 3. 4.(5. and 6. or 7.) 8. 9.

10. In becoming a registered grower for the New Zealand BQA, you must agree to having at least one initial audit and a subsequent follow up audit of your property and your spray control and monitoring diaries in the first year of operation and that in

following years an audit will be undertaken during the first month of harvesting your crop/s. (Section 7.3).

11. In making your application you must list the commodities for which you want registration and the blocks on which they will be grown.

6.1. PRELUDE TO QUALITY SYSTEMS - COMPONENT RESPONSIBILITIES

6.1.1. GROWER CHECKLIST

The following questions are designed to ensure that growers are fully aware of their responsibilities under the conditions and requirements of the BQA and this Manual.

- | | Yes | No |
|---|-----|-------------------------|
| 1. Do you have a copy of the Australian - New Zealand Bilateral Quarantine Agreement? (Not mandatory if a grower answers yes to question 2 below). | | |
| 2. Have you got a copy of the Systems Operational Manual (Growers Section 6.2.1.to 6.3.)? | | |
| 3. Are you aware that fruit flies are of a critical quarantine concern to New Zealand and that fruit flies at any stage of life are a prohibited entry into New Zealand.? (Sections 1.1.1 and 1.2.1.) | | |
| 4. Are you aware of the pests/diseases and weed seeds that are of a quarantine concern to New Zealand? (Sections 1.1.2. and 1.2.2.) | | |
| 5. Do you keep a spray control diary for your property? (Section 6.2.3.) | | If no,go to Question 7 |
| 6. Do you monitor your property for incidence of pest/disease and do you record your observations in your diary? (Section 6.2.3.) | | If no, go to Question 7 |
| 7. Do you use the services of a field crop monitor/adviser/consultant? (Section 6.3.) | | |
| 8. Is this monitor/adviser/consultant aware that you are wanting to register or have registered your property/crop for the New Zealand BQA requirements? (Section 6.3.) | | |
| 9. Are the chemicals that you are using to control pests and disease on your property all registered for the use that you are applying them? (Section 6.2.2.) | | |

To apply for registration for the New Zealand BQA conditions, you must be able to answer YES to questions 1. 2. 3. 4.(5. and 6. or 7.) 8. 9.

10. In becoming a registered grower for the New Zealand BQA, you must agree to having at least one initial audit and a subsequent follow up audit of your property and your spray control and monitoring diaries in the first year of operation and that in following years an audit will be undertaken during the first month of harvesting your crop/s. (Section 15).
11. In making your application you must list the commodities for which you want registration and the blocks on which they will be grown.

6.1.2. PACKINGHOUSE CHECKLIST

The following questions are designed to ensure that packinghouse managers are fully aware of their responsibilities under the conditions and requirements of the BQA and this Manual.

1. Have you registered your packinghouse for the NZ BQA? (Section 6.4.1)
2. Do you source fruit only from growers that are registered for the NZ BQA? (Section 6.4.1)
3. Do you have a system in place that can easily identify a registered NZ grower? (Section 6.4.2.)
4. Do you have a copy of the BQA and Systems Operational Manual? (Section 6.4.1)
5. Do you put growers numbers and packing establishment numbers on all packages going to NZ? (Section 6.4.2.)
6. Are your records able to trace back a consignment of fruit back to growers involved? (Section 6.5.1)
7. Do you segregate grower lines throughout the packing process? (Section 6.4.2.)
8. Do you have a system in place that will prevent any non BQA produce being mixed into the BQA programme? (Section 6.4.2.).
9. Do you record fungicidal dip or spray treatments given to fruit on delivery? (Section 6.5.1.)
10. Do you have a training programme to enable your staff to identify the pests, diseases and weed seeds that are of concern to NZ? (Section 6.5.1.)
11. If you don't have area freedom status for fruit fly, are you aware of the procedure that must be followed if a suspect (sting or bruised) fruit is found? (Section 6.5.1.)
12. Are your key staff aware of the above procedure?(Section 6.5.1.)
13. Does your packinghouse comply with the hygiene requirement for the BQA? (Section 6.5.2)
14. Are you aware of the packinghouse inspection requirements? (Section 6.6.1.)
15. Do you know the procedure that must be followed if fruit fly infestation of a grower line is found? (Section 6.7.)
16. Are you aware of your responsibilities under the BQA and the reasons why you could be suspended from the Agreement? (Section 6.8.)
17. If you are an avocado packinghouse, are you aware of the 'special' requirements contained in Section 13 of this manual that you must comply with?
18. Are you aware that you will be audited by AQIS to ensure you to comply with the NZ BQA? (Section 7.5)

Additional Requirements for Citrus packinghouses and packinghouses that are on AQIS CA arrangements

19. Do you use an 'inline' quality check system within your packing establishment? (Section 6.6.2.and QMP-SM-01)
20. Are you aware of the special requirements needed for packinghouses under a CA arrangement for phytosanitary certification to New Zealand?
21. Do you know that Citrus packinghouses and CA packing sheds must audit growers that are registered with them for the New Zealand BQA? Do you have records for all grower registrations? Have you advised AQIS which growers are registered with you? (Section 6.5.1.and QMP -SM-01)
22. Do you have records of grower audits that you have conducted in accordance with the requirements of the BQA? (Section 6.5.1.and QMP-SM-01)
23. Do you have a system in place that will prevent any non registered BQA produce being mixed into approved programme fruits? (Section 6.5.1.and QMP-SM-01)

If you are able to answer yes to all these questions, you should comply with the NZ requirements under the BQA.

6.1.3. TREATMENT CENTRE CHECKLIST

General Questions

1. Are you able to keep treated product in a secure condition? i.e. subject to no further risk of re-infestation. (Section 5.5)
2. Do you keep records of each treatment? Do these records identify exporter, packer and grower together with commodity and quantities treated?. (Section 5.3.1.)
3. If your treatment centre is located away from export loading centre, do you supervise the loading of treated product for transportation to export centre?. (Section 5.5.)
4. Are records available to show loading and transport details?.(Section 5.5.)
5. If other non BQA commodities are being transported on same conveyance, do you take precautionary measures to ensure that treated produce cannot be re-infested, contaminated or substituted? (Section 5.5.)
6. Do you document how this is performed?.(Section 5.5.)

Fumigation Centres

1. Are your fumigation chambers/tents approved for use by your local Department authorities?.(Section 5.2.2.)
2. Do you have a current registration certificate for your establishment from the Certifying authority?.(Section 5.2.2.)
3. Do you have a current licence to operate a fumigation facility?.(Section 5.2.2.)
4. Are you aware of the time/temperature/dose rates that apply for each commodity under the BQA? (Section 5.2.2.)
5. Are your thermometers calibrated and checked for accuracy?. What method do you use and how often would calibration checks be conducted?.(Section 5.2.2.)
6. Are calibration checks recorded on both files and thermometers?. (Section 5.2.2.)
7. Are records available detailing grower, packinghouse, commodity, quantities, temperature, dose rates and time given for treatments?.(Section 5.3.1.)
8. Are products stamped 'fumigated' with a time/date on as many packages as possible after treatment is completed?. (Section 5.2.2.)

Dimethoate Treatments

1. What system do you use for dimethoate treatment for tomatoes?.(Section 5.2.4.)
2. Are solutions of dimethoate made up immediately prior to use?.(Section 5.2.4.& 5.2.6.)
3. Are additions (chemical plus water) recorded whenever the tanks are topped up with fresh solution?.(Section 5.2.4 & 5.2.6.)
4. If using the spray application for dimethoate treatment, do you check that application rate is satisfactory? Is this recorded?.(Section 5.2.4.)
5. Do you fill out 'Declaration of Treatment' form when forwarding consignments to other areas for export loading? Are copies kept on file?.(Section 5.2.4 & 5.2.6.)

Cold Disinfestation Centres

1. Are your Cold Stores registered with AQIS as an approved premise for treating/storing fresh fruits and vegetables?. (Section 5.2.5.)
2. Do you have sufficient sensors available to enable treatment to be undertaken with 3 sensors required for the first 250 cubic meters of product and an extra sensor required for each 250 cu.m. or part there-of after that?. (Section 5.2.5.)
3. Are your sensors calibrated for accuracy? How often and by what method?(Section 5.3.3.)
4. Are records kept detailing calibration findings? (Section 5.3.3.)
5. Are your chambers equipped with either continuous strip recording thermographs or intermittent temperature recording devices? (Section 5.3.4.)
6. Are temperatures records available showing at least one a.m. and one p.m. daily readout of temperatures? (Section 5.3.5.)
7. Are records available showing date chambers were loaded, type of produce treated, quantities treated by packinghouse and grower lots?.(Section 5.3.5.)
8. Do records show clearly the date temperatures initially recorded 1⁰C plus or minus 0.6⁰C and date treatment concluded or the date the temperature chamber recorded at 0⁰C or below for 13 continuous days?. (Section 5.2.5.)

If as a respondent to the above questions you can answer yes or not applicable then basically you have a system in place that will meet the needs of the BQA and the contents of this Manual.

6.1.3. TREATMENT CENTRE CHECKLIST

General Questions

1. Are you able to keep treated product in a secure condition? i.e. subject to no further risk of re-infestation. (Section 5.5)
2. Do you keep records of each treatment? Do these records identify exporter, packer and grower together with commodity and quantities treated?. (Section 5.3.1.)
3. If your treatment centre is located away from export loading centre, do you supervise the loading of treated product for transportation to export centre?. (Section 5.5.)
4. Are records available to show loading and transport details?.(Section 5.5.)
5. If other non BQA commodities are being transported on same conveyance, do you take precautionary measures to ensure that treated produce cannot be re-infested, contaminated or substituted? (Section 5.5.)
6. Do you document how this is performed?.(Section 5.5.)

Fumigation Centres

1. Are your fumigation chambers/tents approved for use by your local Department authorities?.(Section 5.2.2.)
2. Do you have a current registration certificate for your establishment from the Certifying authority?.(Section 5.2.2.)
3. Do you have a current licence to operate a fumigation facility?.(Section 5.2.2.)
4. Are you aware of the time/temperature/dose rates that apply for each commodity under the BQA? (Section 5.2.2.)
5. Are your thermometers calibrated and checked for accuracy?. What method do you use and how often would calibration checks be conducted?.(Section 5.2.2.)
6. Are calibration checks recorded on both files and thermometers?. (Section 5.2.2.)
7. Are records available detailing grower, packinghouse, commodity, quantities, temperature, dose rates and time given for treatments?.(Section 5.3.1.)
8. Are products stamped 'fumigated' with a time/date on as many packages as possible after treatment is completed?. (Section 5.2.2.)

Dimethoate Treatments

1. What system do you use for dimethoate treatment for tomatoes?.(Section 5.2.4.)
2. Are solutions of dimethoate made up immediately prior to use?.(Section 5.2.4.)

3. Are additions (chemical plus water) recorded whenever the tanks are topped up with fresh solution?.(Section 5.3.6.)
4. If using the spray application for dimethoate treatment, do you check that application rate is satisfactory? Is this recorded?.(Section 5.3.6.)
5. Do you fill out 'Declaration of Treatment' form when forwarding consignments to other areas for export loading? Are copies kept on file?.(Section 5.3.6.)

Cold Disinfestation Centres

1. Are your Cold Stores registered with AQIS as an approved premise for treating/storing fresh fruits and vegetables?. (Section 5.2.5.)
2. Do you have sufficient sensors available to enable treatment to be undertaken with 3 sensors required for the first 250 cubic meters of product and an extra sensor required for each 250 cu.m. or part there-of after that?. (Section 5.2.5.)
3. Are your sensors calibrated for accuracy? How often and by what method?(Section 5.3.3.)
4. Are records kept detailing calibration findings? (Section 5.3.3.)
5. Are your chambers equipped with either continuous strip recording thermographs or intermittent temperature recording devices? (Section 5.3.4.)
6. Are temperatures records available showing at least one a.m. and one p.m. daily readout of temperatures? (Section 5.3.5.)
7. Are records available showing date chambers were loaded, type of produce treated, quantities treated by packinghouse and grower lots?.(Section 5.3.5.)
8. Do records show clearly the date temperatures initially recorded 1°C plus or minus 0.6°C and date treatment concluded or the date the temperature chamber recorded at 0°C or below for 13 continuous days?. (Section 5.2.5.)

If as a respondent to the above questions you can answer yes or not applicable then basically you have a system in place that will meet the needs of the BQA and the contents of this Manual.

6.1.4. EXPORTER CHECKLIST

1. Are you registered with State Department authorities for export to New Zealand of BQA commodities?.(Section 6.9.1.)
2. Do you include your exporter name and address on all packages of BQA product being despatched from your premises or on your behalf from other areas?. Do you check that grower number and registered packinghouse number is included on all packages?.(Section 6.9.1.)
3. Do you have a system which identifies registered growers and packinghouses that can be sourced for New Zealand BQA commodities?.(Section 6.9.1.)
4. Do you undertake the export inspection requirements under the conditions required in the BQA and this Manual or is this duty delegated to other persons?.(Section 6.9.1.)
5. If you undertake this duty, have you and your staff received proper and adequate training in pest and weed seed (if applicable) identification.? (Section 6.9.2.)
6. If export inspection is delegated, have such delegated persons received adequate training in pest and weed seed (if applicable) identification? How do you check this?.(Section 6.9.3.)
7. If export inspection has been delegated, has the delegated person/s acknowledged in writing, acceptance of their responsibilities under the BQA conditions?.(Section 6.9.3.)
8. Are all inspections undertaken by your company or through a delegated person correctly performed and fully recorded in accordance with the requirements of the BQA and the conditions applying in this Manual?. (Section 6.9.3.)
9. Are you and or your delegated inspection point personnel aware of the procedures that must be followed should during inspection detection of fruit fly be found?.(Section 6.6.3.)
10. Do you have appropriate measures for securing BQA commodities on your premises whilst awaiting export consolidation of consignments?. (Section 9.1.2.)
11. Do you check both on arrival and on despatch condition of BQA commodities, is this recorded?. (Section 9.1.2.)
12. Do you ensure the airfreight containers and or the transport being used to freight BQA commodities from your premises to airport/seaport are in a clean condition which will not allow re-infestation or contamination of BQA products? (Section 9.1.2.)
13. Are you aware of the exporters responsibilities and the penalties for failure to comply with these conditions as outlined in this Manual?. (Section 6.1.1.)

14. Do you know of the endorsements which must be made on the phytosanitary certificate accompanying consignments of BQA produce to New Zealand? Are you aware of which commodities require additional declarations on the phytosanitary certificate?. (Section 14)

Exporters must be able to answer yes or not applicable to all the above questions to enable them to participate in the requirements and the responsibilities under the terms of the BQA and the contents of this Manual.

6.1.5. AQIS CHECKLIST - AUDIT FUNCTIONS

It is recommended that in undertaking AQIS audit requirements that the previous checklists be used as a basic guide for the information that we require.

Questions must be framed to learn "how", "when" and "who" etc. undertakes the individual responsibilities for each aspect of any component programme.

6.2. QUALITY SYSTEMS FOR NEW ZEALAND PRODUCE AND COMPONENT RESPONSIBILITIES

All produce being packed under the terms of the BQA must be sourced from registered growers and registered packinghouses.

6.2.1. Grower Registration

Cucurbit growers must refer to Section 15 whilst interim arrangements for dimethoate dipping treatments are in place.

AQIS through its State Agencies, accredited CA Packinghouses and Citrus packinghouses will register all growers who intend to produce fruits/vegetables for export to New Zealand.

Citrus growers who wish to register for the New Zealand market will do so with a registered Packinghouse whether this establishment is accredited for CA or not. All Citrus packinghouses must provide to their State Department area office a list of their registered growers prior to the navel or valencia season commencing. Packinghouses will advise of any additions to, or deletions from, that list during the season.

CA and citrus Packinghouses will hold on file all their individual grower "Applications for Registration" and these must be available for inspection by AQIS officers or MAF officials at any time.

All packinghouses affected by the contents of the above paragraph will be responsible for undertaking all grower audit responsibilities in accordance with the direction contained in Section 7.1.

Growers are required to apply for renewal of registration each year or season for each commodity they wish to export to New Zealand.

Growers will make application to join the arrangement by filling out a "Application for Registration" to export to New Zealand (Appendix 1 or 2).

The S.I. Exports, or in the case of a CA arrangement the designated Packinghouse Manager (and for citrus - all Packinghouse Managers) will be responsible for maintaining the grower register for each commodity/season or year. Registration details will include grower name and address, unique number identifier, approved commodities homogeneity pathway(s) and current status (e.g. active and non active).

For all other commodities (and establishments not on CA arrangements with AQIS), growers must make "Applications for Registration" to the local office of the State Department for registration and these will be held on file in local State offices.

Only those growers who are so registered can export products covered by the Arrangement.

Component Responsibilities and Check Lists

Growers registration identification must be stamped on all packages of their produce and be unique for New Zealand only. This can be done by prefixing growers normal registration numbers with "NZ" or similar designation. It is also permitted, where packinghouses are able to do so, to use discrete pallet coding marks as a method of identification of a grower or growers.

NOTE

Packinghouses using discrete pallet code marking, must have records which will identify all growers being packed during that run. Should at subsequent inspection either in Australia or New Zealand there be found a critical quarantine pest, then all growers under this pallet code would be suspended. No growers would be re-instated until all those growers involved had been audited and found to be clear.

Prior to the commencement of the export season, tomato growers in areas in which fruit flies are present will sign a declaration of intent to the effect that only tomatoes of the varieties Floradade, Hayslip, Tristar, Sunny and Duke will be grown for the New Zealand market. Declaration of Variety document is attached as Appendix 13.

Growers in fruit fly areas who are not packing their own fruit, shall supply with every delivery of tomatoes to the packinghouse, a declaration stating the variety of the tomatoes.

Growers of avocado will sign a declaration to the packinghouse to the effect that all fruits supplied are from registered block under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) and that trees were propagated from stock found to be free of Sun Blotch Viroid.

Declaration form for block/property freedom from SBV under the ANVAS system is attached as Appendix 18.

Packinghouses will only pack for export to New Zealand from growers who have a current Registration approval on file.

Accredited CA and all citrus packinghouses will provide their registered growers with copies of the relevant grower sections of this Manual.

State offices will provide all other growers (non CA and citrus establishments), with relevant sections of this Manual and a copy of the Australian - New Zealand BQA.

6.2.2. Recommended Pest Control Programs

The intention of this requirement is that growers growing produce for New Zealand are fully informed by their State Departments or Industry Organisations of appropriate pest control measures.

Pest control programmes must be fruit fly orientated. In the Riverland, Sunraysia and MIA areas, much of the control work for fruit fly is undertaken by the local State Department who undertake baiting and spray programmes as required and who undertake all monitoring and supervision of the programmes.

These programmes are considered sufficient to meet New Zealand's requirements without growers having to undertake additional monitoring for fruit fly however growers must maintain monitoring for other quarantine pests.

State Departments or Industry bodies, will be responsible for issuing "Spray Charts/Guides" for particular commodities, give growers information and alternatives for sprays/chemicals that are registered for those particular purposes. The charts/guides also list withholding periods for sprays used on maturing crops which the growers must comply with.

These "Spray Charts/Guides" (which must emphasize fruit fly control programmes in areas which are not declared to be fruit fly free) do not have to be New Zealand BQA specific as in most instances they take into account pest and disease problems for a particular commodity in relation to its growing area and this will be considered sufficient.

Growers must have copies of "Spray Chart/Guides" and instructions on treatments (particularly for fruit fly in areas which are not declared to be fruit fly free), relevant to the crops they are growing, with particular reference to withholding periods.

6.2.3. Pest Control/Monitoring Diaries

NOTE: Growers in areas from which produce is certified under area freedom for fruit flies and, in which biological control programmes (Integrated Pest Management - IPM), for other pests are operating, will have minimal obligations under this requirement. However, all spray activity including fungicides and weedicides will be recorded as required under this section. Growers must still maintain monitoring records either their own or those provided by a registered crop monitor, even where IPM is part of their programme.

Growers wanting to register and maintain registration for New Zealand must complete both pest monitoring and pest control diaries for the blocks/properties registered for growing for New Zealand.

A pest control/monitoring diary must include:

- Blocks registered for the New Zealand export programme
- Monitoring and Spray control sections
- A proper record of the types and (numbers) of pests and weeds detected
- Dates of when monitoring and control sprays were undertaken
- Types of sprays, concentration and application rates
- Any preventative action undertaken to control weeds. i.e. cultivation, skirting of trees etc.

A suggested "Pest and Contaminant Monitoring/Spray Diary", as could be used for citrus is attached as Appendices 3 and 4.1 to this Manual. The cover sheet will need to be amended for other commodities.

6.2. QUALITY SYSTEMS FOR NEW ZEALAND PRODUCE AND COMPONENT RESPONSIBILITIES

All produce being packed under the terms of the BQA must be sourced from registered growers and registered packinghouses.

6.2.1. Grower Registration

Cucurbit growers must refer to Section 15 whilst interim arrangements for dipping treatments are in place.

AQIS through its State Agencies, accredited CA Packinghouses and Citrus packinghouses will register all growers who intend to produce fruits/vegetables for export to New Zealand.

Citrus growers who wish to register for the New Zealand market will do so with a registered Packinghouse whether this establishment is accredited for CA or not. All Citrus packinghouses must provide to their State Department area office a list of their registered growers prior to the navel or valencia season commencing.

Only those growers who are so registered can export products covered by the Arrangement.

Growers registration identification must be stamped on all packages of their produce and be unique for New Zealand only. This can be done by prefixing growers normal registration numbers with "NZ" or similar designation. It is also permitted, where packinghouses are able to do so, to use discrete pallet coding marks as a method of identification of a grower or growers.

NOTE

Packinghouses using discrete pallet code marking, must have records which will identify all growers being packed during that run. Should at subsequent inspection either in Australia or New Zealand there be found a critical quarantine pest, then all growers under this pallet code would be suspended. No growers would be re-instated until all those growers involved had been audited and found to be clear.

Growers are required to apply for renewal of registration each year or season for each commodity they wish to export to New Zealand.

The S.I. Exports, or in the case of a CA arrangement the designated Packinghouse Manager (and for citrus - all Packinghouse Managers) will be responsible for maintaining the grower register for each commodity/season or year. Registration details will include grower name and address, unique number identifier, approved commodities homogeneity pathway(s) and current status (e.g. active and non active).

Growers will make application to join the arrangement by filling out a "Application for Registration" to export to New Zealand (Appendix 1 or 2).

Prior to the commencement of the export season, tomato growers in areas in which fruit flies are present will sign a declaration of intent to the effect that only tomatoes of the varieties Floradade, Hayslip, Tristar, Sunny and Duke will be grown for the New Zealand market. Declaration of Variety document is attached as Appendix 13.

Growers in fruit fly areas who are not packing their own fruit shall supply with every delivery of tomatoes to the packinghouse, a declaration stating the variety of the tomatoes.

Growers of avocado will sign a declaration to the packinghouse to the effect that all fruits supplied are from registered block under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) and that trees were propagated from stock found to be free of Sun Blotch Viroid.

Declaration form for block/property freedom from SBV under the ANVAS system is attached as Appendix 18.

CA and citrus Packinghouses will hold on file all their individual grower "Applications for Registration" and these must be available for inspection by AQIS officers or MAF officials at any time. CA and citrus Packinghouses will supply a list of registered growers to the local State Department office annually and prior to the commencement of packing fruits of that grower/s during any season. Packinghouses will advise of any additions to, or deletions from, that list during the season.

For all other commodities (and establishments not on CA arrangements with AQIS), growers must make "Applications for Registration" to the local office of the State Department for registration and these will be held on file in local State offices.

Packinghouses will only pack for export to New Zealand from growers who have a current Registration approval on file.

Accredited CA and all citrus packinghouses will provide their registered growers with copies of the relevant grower sections of this Manual.

State offices will provide all other growers (non CA and citrus establishments) with relevant sections of this Manual and a copy of the Australian - New Zealand BQA.

6.2.2. Recommended Pest Control Programs

The intention of this requirement is that growers growing produce for New Zealand are fully informed by their State Departments or Industry Organisations of appropriate pest control measures.

Pest control programmes must be fruit fly orientated. In the Riverland, Sunraysia and MIA areas, much of the control work for fruit fly is undertaken by the local State Department who undertake baiting and spray programmes as required and who undertake all monitoring and supervision of the programmes.

State Departments or Industry bodies, will be responsible for issuing "Spray Charts/Guides" for particular commodities, give growers information and alternatives for sprays/chemicals that are registered for those particular purposes. The charts/guides also list withholding periods for sprays used on maturing crops which the growers must comply with.

These "Spray Charts/Guides" (which must emphasize fruit fly control programmes in areas which are not declared to be fruit fly free) do not have to be New Zealand BQA specific as in most instances they take into account pest and disease problems for a particular commodity in relation to its growing area and this will be considered sufficient.

Growers must have copies of "Spray Chart/Guides" and instructions on treatments (particularly for fruit fly in areas which are not declared to be fruit fly free) relevant to the crops they are growing, with particular reference to withholding periods.

6.2.3. Pest Control/Monitoring Diaries

NOTE: Growers in areas from which produce is certified under area freedom for fruit flies and, in which biological control programmes for other pests are operating, will have minimal obligations under this requirement however, all spray activity including fungicides and weedicides will be recorded as required under this section.

Growers wanting to register and maintain registration for New Zealand must complete both pest monitoring and pest control diaries for the blocks/properties registered for growing for New Zealand.

A pest control/monitoring diary must include:

- Blocks registered for the New Zealand export programme
- Monitoring and Spray control sections
- A proper record of the types and (numbers) of pests and weeds detected
- Dates of when monitoring and control sprays were undertaken
- Types of sprays, concentration and application rates

A suggested "Pest and Contaminant Monitoring/Spray Diary", as could be used for citrus is attached as Appendices 3 and 4.1 to this Manual. The cover sheet will need to be amended for other commodities.

6.3. Crop Monitoring Services

Growers may use the services of AQIS registered commercial crop monitors/ for field monitoring purposes.

Growers must still maintain spray control diaries to show corrective actions applied to the property but will not have to maintain monitoring diaries.

Commercial crop monitors, providing services under the New Zealand BQA will be approved and registered by AQIS (Application Form see Appendix 14). The Senior Inspector within each Region will be responsible to assess each application based on the persons knowledge of each industry, experience in pest control, knowledge of chemicals and ability to advise growers.

Commercial crop monitors who provide services to registered BQA growers must have a good knowledge of all quarantine pests and weed seeds that are listed in MPL's (BQA Appendix 2 and Section 2 of this manual). Advisors when recommending corrective action (controls/sprays) must only recommend sprays/chemicals from the "Authorized agencies Spray Charts" for that commodity. Where other pests are detected requiring control measures, recommendations must be made with registered chemicals and in accordance with label instructions, and are acceptable for New Zealand maximum residue levels.

Commercial crop monitors must keep individual grower records for each grower/commodity that they provide field monitoring services for. A record of each field visit to a grower must be given to the grower together with any recommended corrective action and the crop monitor must keep a copy in their grower register. Failure to do so will jeopardise continuing registration as an approved field advisor under the BQA arrangements.

Commercial crop monitors must advise AQIS immediately should a BQA registered grower be found not to be complying with the requirements or conditions of property hygiene.

Commercial crop monitors will make all BQA registered grower property records available for AQIS/MAF audit when required to do so. AQIS 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 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 grower will be scheduled against the crop monitoring functions.

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 with non-recommended or unregistered chemicals

6.3. Crop Monitoring Services

Growers may use the services of AQIS registered commercial crop monitors/ for field monitoring purposes.

Growers must still maintain spray control diaries to show corrective actions applied to the property but will not have to maintain monitoring diaries.

Crop monitors will supply to the Senior Inspector/Supervisor in each area, a register of growers (New Zealand specific if this is known), for whom they are providing crop monitoring services annually and, will advise the AQIS area office of any amendments to this register immediately they become known.

Commercial crop monitors, providing services to growers who are registered under the New Zealand BQA, will be approved and registered by AQIS (Application Form see Appendix 14). The Senior Inspector within each Area/Region will be responsible to assess each application based on the persons knowledge of each industry, experience in pest control, knowledge of chemicals and ability to advise growers.

Commercial crop monitors who provide services to registered BQA growers must have a good knowledge of all quarantine pests and weed seeds that are listed in MPL's (BQA Appendix 2 and Section 2 of this manual). Advisors when recommending corrective action (controls/sprays), must only recommend sprays/chemicals from the "Authorized agencies Spray Charts" for that commodity. Where other pests are detected requiring control measures, recommendations must be made with registered chemicals and in accordance with label instructions, and are acceptable for New Zealand maximum residue levels.

In accordance with good manufacturing process, weed monitoring in permanent planted orchards, (i.e. citrus, mango and pome fruits), is not required where the grower undertakes and records preventative measures. i.e. skirting of citrus trees, growing clover between rows of trees or cultivates the ground between trees. However, for those crops which are known to experience weedseed problems (table grapes, cucurbit and capsicums), both monitoring and control records must be undertaken and made available at audit.

Commercial crop monitors must keep individual grower records for each grower/commodity/blocks and or property, that they provide field monitoring services for. A record of each field visit to a grower must be given to the grower together with any recommended corrective action and the crop monitor must keep a copy in their grower register. AQIS will audit this aspect and any failure to have detailed grower field visits will jeopardise continuing registration as an approved field advisor under the BQA arrangements.

Growers can seek agreement with the crop monitor to defer specified corrective actions if the grower feels that under the Integrated Pest Management schemes there is a good chance that predator numbers are improving and would like to re-assess the situation in a few days time. Where such an instance occurs, the details should be entered into the growers monitoring diaries.

As commercial practice with crop monitoring means not all blocks are necessarily monitored, the following guidelines should be implemented.

Component Responsibilities and Check Lists

- It is recommended, at least one block that is registered for the New Zealand programme is to be included in the crop monitors property assessments.
- The recommendations of the crop monitor made on analysis of those blocks assessed, must be applied to all blocks within the property,
 - unless the crop monitor specifically assesses and records that this action is not required for all blocks or,
 - the registered grower undertakes monitoring of the other blocks and records regularly the results for the crop monitor to assess, and the crop monitor records that complete property control is not necessary.

Commercial crop monitors must advise AQIS immediately should a BQA registered grower be found not to be complying with the requirements or conditions of property hygiene.

Commercial crop monitors will make all BQA registered grower property records available for AQIS/MAF audit when required to do so. AQIS 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.

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 grower will be scheduled against the crop monitoring functions.

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 with non-recommended or unregistered chemicals

6.4. Packinghouse Responsibilities

6.4.1. Registration

Packinghouses wishing to be registered under the BQA will make annual application for registration under individual commodity groups and will make application for registration as per Appendix 5 of this Manual. The appropriate registration fee will be paid, prior to registration being approved, as required under the Export Control (Fees) Orders.

Packinghouses who intend to pack produce for export to New Zealand will have available at all times a copy of the BQA and relevant Sections of this Manual.

Packinghouses packing for export to New Zealand will include their registration identification on all packages.

Packinghouses will only source fruit for packing for New Zealand from growers currently registered for that commodity under the BQA.

Packinghouses packing cucurbit crops under the interim arrangements that have been agreed with MAF for dimethoate dipping must refer to Section 15 of this Manual for procedures that will apply.

6.4.2. Grower Identification

The produce submitted for packing from any grower will be correctly and legibly marked at all times whilst in the packinghouse. The final packed product will have included in the trade description the details of the grower by way of registered growers number or a discrete pallet code number and the registered number of the packinghouse. (See Note under Section 6.2.1.).

New Zealand produce will be kept segregated from all other general market produce whilst in bulk or in packed state. The produce will be clearly marked 'For New Zealand' or other similar wording so as it can be clearly identified by all packinghouse staff.

6.4.3. Grower end-point inspection

Packinghouses packing cucurbits under the interim arrangements for dimethoate dipping must refer to Section 15 of this Manual for the procedures that have been agreed with MAF for inspection of this produce.

Under the two 'end-point' inspection systems, (600 units or 100% inspection, refer Section 3 of this Manual), AQIS will perform individual grower line inspections. Whilst 'in-line' quality control records during the packing of such products is desirable it is not mandatory.

*T. G. Gray
Wairarapa
Pumpkin*

For 'process production' and 'Certification Assurance' systems the Exporter, or their appointed delegate, shall perform either 'in-line' or 'end point' inspection of each grower line.

Records of the 'in-line' quality checks will be kept and made available on request to an authorized AQIS Officer.

'End point' inspection will consist of either a 600, 950 or 1250 unit sampling in accordance with procedures outlined in this Manual and full records of all inspections will be retained by the Establishments and made available to an AQIS authorized Officer on request.

Following Exporter end point grower inspections the exporter may consolidate the produce contained under any one commodity line (i.e. cucurbits) to present to AQIS for inspection as a 600, 950 or 1250 unit consignment sample in accordance with inspections undertaken by the exporter or the exporter delegate.

6.5.1. Operation Requirements

Packinghouses are responsible for ensuring that growers identification numbers are marked on all packages relating to that grower. It is permitted, where packinghouses are able to do so, to apply discrete pallet codes in lieu of growers numbers, but packinghouses will have accurate systems in place that will identify the grower/growers for trace back purposes. (See Note under Section 6.2.1. of this Manual).

Packinghouses will have an adequately documented receival system to enable easy identification of New Zealand registered growers product.

Packinghouses packing avocados for New Zealand will comply with the requirements contained in Section 13 of this Manual for the treatment and packing of avocados with SBV area freedom status.

CA accredited packinghouses will audit growers who have filed a completed "Declaration of Intent to Export", and all audit details will be retained on growers application for registration files and will be made available to AQIS officers when ever required.

Identification and segregation of grower lines will be maintained throughout the packing process.

Packinghouses used by many growers should have a system in which BQA prescribed goods are identified on both ends of a bulk pallets or bins/crates. Whilst this is not mandatory, an inspector must be satisfied that methods used, will prevent any non-BQA commodities being accidentally entered into the BQA packing programmes.

Where BQA commodities are subjected to fungicidal dip or spray treatments on receipt into a packinghouse, the packinghouse will have a system which identifies the fruit/vegetables so treated. Packinghouses involved in these types of programmes will record types of fungicides, concentration rates and times at which such fruit/vegetables were treated by dip/spray. Treated prescribed goods belonging to BQA programmes will be kept adequately segregated from all other fruits/vegetables not belonging to such programmes.

Before handling BQA prescribed goods, the packinghouse will have thoroughly cleaned the processing areas of all other fruits/vegetables, all debris and waste of other such fruits and vegetables, because of the risk of cross contamination/infestation to BQA fruits/vegetables.

Packinghouses will ensure that all relevant staff are advised when they are packing commodities covered by the BQA. Ideally charts showing relevant pests, disease and weed seeds (if appropriate) should be prominently displayed. Packinghouse staff must have a sound knowledge of the relevant pests, disease and weed seeds and packinghouse rejection procedures. Inspectors must be assured that all staff involved in the sorting, grading and packing of BQA prescribed goods know the tolerances which apply to specific commodity for pests disease and contaminants.

Quality control records for New Zealand packs will detail fruit packed by grower number, condition of the produce and infestation levels if necessary and the corrective measures applied to meet the conditions of the BQA and the contents of this Manual.

In areas which do not have fruit fly free status, produce found to have insect stings or rots will be cut to ensure no evidence of egg or larva is found. Quality control (QC) records will be kept detailing grower number, amount of fruit cut and the result, even if cleared. The use of a lens is required when assessing cut fruit and such work will be performed by the QC officer or under his/her supervision. Inspectors will ensure this procedure is being carried out and documented whenever fruit is being packed for BQA programmes.

6.5.2. Registered Establishments - Operational Hygiene

Establishments registered for packing prescribed goods under the BQA arrangements will at all times comply with the operational hygiene requirements of the EC(FF&V)O's and the Functional Standards for Fresh Fruit and Vegetable Establishments Code of Practice October 1992.

6.6.1. Inspection Requirements

Compliance with the Inspection Tolerance Table (Section 1 of this manual) will be inspected for and fully recorded by Packinghouse Manager or Quality Controller using one of the following methods:

6.6.2. Under Certification Assurance Arrangements (CA)

Under CA arrangements, establishments have their own quality systems which identify defective product throughout the production and packaging processes, and which ensure that all product meets nominated phytosanitary or other requirements. Instead of inspecting each export consignment, AQIS audits the quality systems operating at the individual establishments.

All conditions and requirements as stipulated in the Certification Assurance Arrangements System Manual QMP - SM-01 will be complied with at all times.

Component Responsibilities and Check Lists

Packinghouses will ensure that all relevant staff are advised when they are packing commodities covered by the BQA. Ideally charts showing relevant pests, disease and weed seeds (if appropriate) should be prominently displayed. Packinghouse staff must have a sound knowledge of the relevant pests, disease and weed seeds and packinghouse rejection procedures. Inspectors must be assured that all staff involved in the sorting, grading and packing of BQA prescribed goods know the tolerances which apply to specific commodity for pests disease and contaminants.

Quality control records for New Zealand packs will detail fruit packed by grower number, condition of the produce and infestation levels if necessary and the corrective measures applied to meet the conditions of the BQA and the contents of this Manual.

In areas which do not have fruit fly free status, produce found to have insect stings or rots will be cut to ensure no evidence of egg or larva is found. Quality control (QC) records will be kept detailing grower number, amount of fruit cut and the result, even if cleared. The use of a lens is required when assessing cut fruit and such work will be performed by the QC officer or under his/her supervision. Inspectors will ensure this procedure is being carried out and documented whenever fruit is being packed for BQA programmes.

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Establishments registered for packing prescribed goods under the BQA arrangements will at all times comply with the operational hygiene requirements of the EC(FF&V)O's and the Functional Standards for Fresh Fruit and Vegetable Establishments Code of Practice October 1992.

Before handling BQA prescribed goods, the packinghouse will have thoroughly cleaned the processing areas of all other fruits/vegetables, all debris and waste of other such fruits and vegetables, because of the risk of cross contamination/infestation to BQA fruits/vegetables.

6.6.1. Inspection Requirements

Compliance with the Inspection Tolerance Table (Section 1 of this manual) will be inspected for and fully recorded by Packinghouse Manager or Quality Controller using one of the following methods:

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Under CA arrangements, establishments have their own quality systems which identify defective product throughout the production and packaging processes, and which ensure that all product meets nominated phytosanitary or other requirements. Instead of inspecting each export consignment, AQIS audits the quality systems operating at the individual establishments.

All conditions and requirements as stipulated in the Certification Assurance Arrangements System Manual QMP - SM-01 will be complied with at all times.

7. AUDITING REQUIREMENTS - GROWERS - PACKINGHOUSES

7.1. Grower Audits -By Certified Assurance and Citrus Packinghouses

Grower audits will be conducted by CA packinghouses to whom the grower has made the "Application for Registration". Each grower so registered, will be audited by the relevant packinghouse in accordance with the requirements and procedures as detailed in Certification Assurance Arrangements Systems Manual (Attachment 2 part 6).

Citrus packinghouses (not on Certified Assurance) must audit growers in the same manner as outlined for AQIS inspection staff, (Section 7.2 below).

All grower audits undertaken by packinghouses must be fully recorded and this record should be placed in the growers application for registration folio every year/season.

Any grower found during a packinghouse audit of property/records, not to be complying with the requirements of the Arrangement, must be placed on "suspension" and the packinghouse must advise the AQIS Senior Inspector in the Region immediately.

AQIS inspection staff will perform random audits of 5% of growers from each CA and/or citrus packinghouse each season/year to verify that arrangement requirements are being complied with. Should deficiencies be identified that require immediate corrective action, then audits of growers will increase to 10% of that Packinghouse registered growers. Where a Packinghouse random audit of growers confirms substantial compliance on all issues related to grower registration, that Packinghouse will be reduced to only 2 1/2% of growers being audited in the following year. This will be the minimum number of random audits that will be performed in any season/year.

AQIS will charge the packinghouse for the grower audits conducted to verify packinghouse compliance with the grower registration requirements.

During any audit of CA or citrus packinghouse for grower compliance with monitoring and spray diaries and basic orchard hygiene should there be substantial non-compliance i.e. no diaries, no adequate controls, the packinghouse will be suspended from the NZ program, and all growers may be audited by AQIS before re-registration for NZ will be permitted.

Any non-compliance identified in grower random audits could mean suspension from the programme for both packinghouse and grower.

The inspector will report to his/her immediate supervisor, any irregularity found during such audits.

A designated Quality Controller will examine a pre-determined number of fruits/vegetables taken from the packing line at a regular interval. The size of each sample and the regularity will be at the discretion of the Quality Controller, however the lot must be made up of a single commodity, will be identifiable and a minimum of 600* units will be inspected from each lot. **Each unit within the sample will be inspected and details fully recorded using the guidelines in Appendix 6. Representative lot sampling can be attained using Table 2 as a guide.**

**TABLE 2
DETERMINING SAMPLE SIZE**

	No of Fruits	Per	Over time	Total
(a)	100	1/2 hour	3 hours	600*
(b)	200	hour	3 hours	600*
(c)	100	hour	6 hours	600*

* Example only - 450 or 950 unit samples are permitted depending on sampling regime allowed and the rate being declared prior to inspections commencing.

The periods over which samples are taken constitutes the lot to be inspected, and, on which the accept/reject decision is made. The time of commencement and the cessation of lot packing must be recorded as is the sampling method used. These records must be fully detailed and available for audit by AQIS/MAF officers. Lots must be kept segregated. Lots determined by inspection as not conforming with the MPLs, will not be permitted for export to New Zealand.

Packinghouse inspection staff are required to inspect fruits/vegetables for the presence of fruit fly symptoms (bruising, soft spots, stings etc) and for infestation by other quarantine pests/weed seeds and reject such fruit accordingly.

During inspection of produce for compliance with BQA requirements any fruits which show signs of rots/stings will be cut to check for fruit fly infestation.

All fruits cut, will be recorded on inspection reports showing the results of the examination.

6.6.3. Packinghouses not on an approved Certified Assurance Arrangement.

A Packinghouse will have a designated Quality Control Officer/Supervisor who will be responsible for ensuring all relevant staff are aware of their responsibilities.

Packinghouse inspection staff are required to inspect fruits/vegetables for the presence of fruit fly symptoms (bruising, soft spots, stings etc) and for infestation by other quarantine pests/weed seeds and reject such fruit accordingly.

During inspection of produce for compliance with BQA requirements any fruits which show signs of rots/stings will be cut to check for fruit fly infestation.

All fruits cut, will be recorded on inspection reports showing the results of the examination.

Whilst grower line sample inspections are not required to be performed at packinghouse level (unless the exporter has delegated this responsibility) records will be kept of any fruit/vegetables rejected for infestation with quarantine pests/weed seeds, the grower and the quantities infested.

6.7. Isolation of Rejected Produce all Registered Packinghouses

If a packinghouse detects fruit flies or possible fruit fly infestation at any time during the packing of a growers lot, all produce from that grower lot both packed and unpacked will be effectively isolated then removed from the premises at the earliest opportunity.

Isolation of an affected growers lot in a common coolroom, fumigation tent or chamber on the premises, where produce from other growers registered to export to New Zealand (and could be stored), is not permitted unless a physical barrier such as a well secured tarpaulin or plastic sheeting completely covers the fruit to be isolated.

The packinghouse will advise at the earliest opportunity, by fax or in writing, the AQIS officer in that region of a fruit fly detection and the grower involved.

The packinghouse will also advise the AQIS officer in that region at the earliest opportunity of product supplied by a grower, that is heavily infested with quarantine pests or weed seeds, so that AQIS can perform a grower audit and endeavour to establish the reasons for such contamination.

6.8. Rules for Failure

AQIS inspectors will consider "suspension" of any packinghouse which fails to carry out any of the duties or responsibilities of the Arrangement that a packinghouse has been given, particularly where such failures may or could cause the conditions of the Arrangement to be breached.

All elements mentioned within this section are integral to the Arrangement and will be monitored/audited together with the following:

- . Construction of establishment - should conditions change (ie storm and tempest damage, vandalism.)
- . Hygiene and operating conditions - a deterioration of good housekeeping, unclean drains or equipment which could cause pest or vermin infestation or build up.
- . Improper, incorrect or no record keeping - during packing operation.
- . Improper or no segregation of produce packed for New Zealand and other produce for other purposes.

- Improper or no identification of produce packed for New Zealand and other produce for other purposes.

Breaches of any of the above items may not result in suspension, where the inspector is satisfied, that immediate and appropriate corrective action has been/will be implemented.

Breaches of any of the above, where a manager/operator refuses to initiate immediate corrective action will cause suspension of the packinghouse for New Zealand protocol.

Should an inspector find an establishment in breach of the terms of the Arrangement, the inspector will, following consultation with their supervising or senior officer, fill out "Suspension Notice" Appendix 11 and give a copy of this form to the Packinghouse Manager/Operator suspending their operations for New Zealand. The Inspector will immediately (preferably by fax) advise the State Office of the suspension and State Office will advise appropriate exporters that the packinghouse has been suspended.

A packinghouse under suspension for any of the above reasons may re-apply for registration for the New Zealand programme at any time and will be subject to inspection audit requirements as contained in this Manual before a re-instatement is permitted.

Subject to a satisfactory audit being conducted the packinghouse may be re-registered under the BQA.

6.9.1. Requirements for Exporters

Exporters wishing to export BQA commodities to New Zealand will be registered by AQIS to do so. Application for "Registration and Inspection Responsibilities" is attached as Appendix 7.

Copies of the above named registration forms will be collated by State Offices.

State offices will forward to Canberra office (New Zealand Contact Officer) a summary of registered exporters as at 31 December each year. This will enable CO to co-ordinate pathway audits of exporters through various States if required.

The identity of the exporter will be included on all packages covered by the BQA.

Exporters are responsible for ensuring that all products presented for inspection by AQIS, have been produced by registered growers and packers and that all the requirements of the BQA and this Manual have been complied with.

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 produce has been produced and packed according to the conditions prescribed in the Arrangement between AQIS and MAF concerning the access of (insert commodity) into New Zealand from Australia"

Growers Name.....No:.....

Packers Name.....No:.....

Exporter requirements for post treatment security, records of condition etc are contained in Section 9 of this Manual.

6.9.2. Exporter Inspection

Where growerline inspections are performed by the Exporter full details of the inspection performed will be recorded by that person using the "Inspection Record" form attached Appendix 6. *

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.

Grower line inspections ensure homogeneity if co-joined for consignment shipments for the purpose of AQIS inspection and certification. *

Export inspection is not required for packinghouses who have an accredited CA arrangement with AQIS.

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

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 audit.

6.9.3. 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.

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

Any person/s who are delegated the responsibility for undertaking exporter inspections must have the ability to identify those pests and weed seeds (if applicable) 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 where appropriate.

All inspections performed by exporter delegated persons will be recorded on an "Inspection Record" and held on file by that delegate.

6.10. Isolation Procedures for Rejected Produce

Should an exporter or exporters' delegate during inspection of produce, detect fruit fly or possible 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 what action they are taking to ensure there is no cross contamination of other BQA produce.

AQIS inspectors will formally advise grower/s in writing, that they are suspended from the NZ programme pending further investigation.

6.11. Rules for Failure

Should an exporter be found at any time to:

- have accepted produce from an unregistered grower or packinghouse and present such produce to an AQIS Officer for clearance under the BQA
- be not carrying out the exporter inspection in conformity with set procedures/requirements
- have delegated responsibility to a nominated person who is not carrying out exporter inspection in accordance with set procedures/ requirements
- not be keeping adequate or accurate records of all inspections carried out by the exporter or their delegate
- present any commodity for inspection which has not been produced or packed in accordance with the requirements of the BQA or this Manual

the Senior Inspector (Exports) within the State will be notified immediately by the AQIS officer. The Senior Inspector (Exports) will notify the exporter concerned of any such incident and inform the exporter that they are "suspended" from the BQA until investigation of the incident is completed and necessary corrective action is in place.

The Senior Inspector or his delegate will conduct necessary investigation re the breach of conditions/responsibilities to establish whether the breach was -

- (a) accidental
- (b) performed in ignorance
- (c) result of poor communication
- (d) deliberate.

If after investigation the Senior Inspector is satisfied that no intent was meant to breach the terms of the Arrangement, and that corrective action is being immediately undertaken to ensure that it should not occur again, the Senior Inspector will formally advise the exporter that they are reinstated to the BQA programme.

Any such investigation must be undertaken at the earliest available opportunity so that the pathway is not inconvenienced to any extent should clearance or reinstatement be permitted.

If on investigation serious deficiencies were revealed, to an extent where training of staff in inspection procedures under the terms of the Arrangement was necessary, the exporter/exporters' delegate will remain "suspended" until such training has been satisfactorily completed and verified by AQIS officers. In such cases the exporter/exporters' delegate will advise AQIS State Headquarters office that training is complete and a satisfactory audit by AQIS will be required before re-instatement into program.

Should an investigation reveal a deliberate breach of conditions/responsibilities, an Incident Report shall be instigated and forwarded to the Compliance Section in the relevant State.

The exporter will be immediately suspended from the programme and will remain so until Compliance Section investigate and clear the matter officially.

6.12.1. AQIS Inspection Procedures

AQIS will carry out inspections as required under the New Zealand BQA 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 free area in which to perform inspection functions.

AQIS inspection may be by grower line or by consignment line at the option of the exporter and will be in accordance with the sampling plan detailed in Section 1 and at the same sample regime as used by the exporter/exporter delegate.

Inspections performed by AQIS for the BQA programmes will be recorded on "Inspection Record - New Zealand" Appendix 6 attached.

Packinghouses who have an approved Certified Assurance programme, which includes phytosanitary certificate/quarantine arrangements, will not be subjected to AQIS consignment inspections other than that required under CA auditing procedures.

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

NOTE: Notwithstanding the requirements of this Manual, should AQIS 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 commence their inspection. If all records are not provided or any records are incomplete then the consignment will not be inspected until these records are provided or it can be inspected on an individual grower line basis.

AQIS Inspectors issuing Export Permits and phytosanitary certificates for produce to New Zealand under the BQA will ensure that all growers and packers are registered under the Agreement and that their identification is legible on all packages.

Incorrect or illegible identification on packages will disqualify that produce from export to New Zealand. The use of stickers to cover or amend trade description details is permitted, as long as they are neatly applied and are of a type that cannot be easily removed.

6.12.2. Method of Drawing Samples

With consignment inspections it is not necessary for AQIS staff to inspect produce from each grower making up the consignment, although if it is possible, it is wise to do so.

When assessing which growers/commodities should be selected for consignment inspection, the inspector should do so on the basis of knowledge of the commodities likely to present the greatest risk, or from past history of growers/packers making up the consignment.

There can be no hard and fast rules in how to apply selection for consignment lots however, the following may assist:

- select one or more samples from the grower submitting the largest lot.
- select one or more samples from the commodity comprising the greatest quantity in the consignment..
- select at least one carton from the commodity seen to present the greatest quarantine risk
- select at least one carton from known "poorer" performing growers/packers or newly registered growers/packers.

6.12.3. Grower Line Lots

A grower line is any number of packages of one commodity from one grower presented for inspection at one time. This includes a grower line that is presented for inspection that will be subsequently split into separate consignments for export to several destinations in New Zealand.

Consignment/Grower 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. The use of cards or stickers placed onto pallets by the exporter/exporter delegate is recommended.

6.12.4. 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.

A grower who fails inspection due to quarantine pests twice in any one season must be audited as soon as practicable after the second failure. The inspector/s performing this audit must consider the reasons for failure and if necessary be prepared to seek the growers voluntary withdrawal from the scheme or consider suspension of the grower.

Packinghouses who fail two inspections in any one season must be audited immediately to ascertain if there are reason that AQIS may consider necessary for suspending the packinghouse from the New Zealand programme, or if corrective actions can be implemented quickly the need for a follow up audit within 7 days.

The requirements for reconditioning of produce rejected by AQIS for export to New Zealand are contained in Appendix 17 attached.

The following conditions will apply for rejected products:

Any rejection for Category "A" Pests - Immediate suspension of grower, packer, exporter/exporter delegate. Audit to be undertaken at earliest opportunity.

Any rejection for Category "B" 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.

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6.2. QUALITY SYSTEMS FOR NEW ZEALAND PRODUCE AND COMPONENT RESPONSIBILITIES

All produce being packed under the terms of the BQA must be sourced from registered growers and registered packinghouses.

6.2.1. Grower Registration

AQIS through its State Agencies, accredited CA Packinghouses and will register all growers who intend to produce fruits/vegetables for export to New Zealand.

Citrus growers who wish to register for the New Zealand market will do so with a registered Packinghouse whether this establishment is accredited for CA or not. All Citrus packinghouses must provide to their State Department area office a list of their registered growers prior to the navel or valencia season commencing.

Only those growers who are so registered can export products covered by the Agreement.

Growers registration identification must be stamped on all packages of their produce and be unique for New Zealand only. This can be done by prefixing growers normal registration numbers with "NZ" or similar designation. It is also permitted, where packinghouses are able to do so, to use discrete pallet coding marks as a method of identification of a grower or growers.

NOTE

Packinghouses using discrete pallet code marking, must have records which will identify all growers being packed during that run. Should at subsequent inspection either in Australia or New Zealand there be found a critical quarantine pest, then all growers under this pallet code would be suspended. No growers would be re-instated until all those growers involved had been audited and found to be clear.

Growers are required to apply for renewal of registration each year or season for each commodity they wish to export to New Zealand.

The S.I. Exports, or in the case of a CA arrangement the designated Packinghouse Manager (and for citrus - all Packinghouse Managers) will be responsible for maintaining the grower register for each commodity/season or year. Registration details will include grower name and address, unique number identifier, approved commodities homogeneity pathway(s) and current status (e.g. active and non active).

Growers will make application to join the agreement by filling out a "Application for Registration" to export to New Zealand (Appendix 1 or 2).

Prior to the commencement of the export season, growers in areas in which fruit flies are present will sign a declaration of intent to the effect that only tomatoes of the varieties Floradade, Hayslip, Tristar, Sunny and Duke will be grown for the New Zealand market. Declaration of Variety document is attached as Appendix 13.

Growers in fruit fly areas who are not packing their own fruit shall supply with every delivery of tomatoes to the packinghouse, a declaration stating the variety of the tomatoes.

Growers of avocado will sign a declaration to the packinghouse to the effect that all fruits supplied are from registered block under the Avocado Nursery Voluntary Accreditation Scheme (ANVAS) and that trees were propagated from stock found to be free of Sun Blotch Viroid.

Declaration form for block/property freedom from SBV under the ANVAS system is attached as Appendix 18.

"Applications for Registration" will be held on file in local State offices where growers make application to the State Department for registration. CA and citrus Packinghouses will supply a list of registered growers to the local State annually and prior to the commencement of packing fruits of that grower/s during any season. Packinghouses will advise of any additions to, or deletions from, that list during the season.

The "Applications" will be held by the CA and citrus Packinghouses and be available for inspection by AQIS officers or MAF officials at any time.

Packinghouses will only pack for export to New Zealand from growers who have a current Registration approval on file.

Accredited CA and all citrus packinghouses will provide their registered growers with copies of the relevant grower sections of this Manual.

State offices will provide all other growers (non CA and citrus establishments) with relevant sections of this Manual and a copy of the Australian - New Zealand BQA.

6.2.2. Recommended Pest Control Programs

The intention of this requirement is that growers growing produce for New Zealand are fully informed by their State Departments or Industry Organisations of appropriate pest control measures.

State Departments or Industry bodies, will be responsible for issuing "Spray Charts/Guides" for particular commodities, give growers information and alternatives for sprays/chemicals that are registered for those particular purposes. The charts/guides also list withholding periods for sprays used on maturing crops which the growers must comply with.

These "Spray Charts/Guides" (which must emphasize fruit fly control programmes) do not have to be New Zealand BQA specific as in most instances they take into account pest and disease problems for a particular commodity in relation to its growing area and this will be considered sufficient.

Growers must have copies of "Spray Chart/Guides" and instructions on treatments (particularly for fruit fly) relevant to the crops they are growing, with particular reference to withholding periods.

6.2.3. Pest Control/Monitoring Diaries

NOTE: Growers in areas from which produce is certified under area freedom for fruit flies and, in which biological control programmes for other pests are operating, will have minimal obligations under this requirement however, all spray activity including fungicides and weedicides will be recorded as required under this section.

Growers wanting to register and maintain registration for New Zealand must complete both pest monitoring and pest control diaries for the blocks/properties registered for growing for New Zealand.

A pest control/monitoring diary must include:

- Blocks registered for the New Zealand export programme
- Monitoring and Spray control sections
- A proper record of the types and (numbers) of pests and weeds detected
- Dates of when monitoring and control sprays were undertaken
- Types of sprays, concentration and application rates

A suggested "Pest and Contaminant Monitoring/Spray Diary", as could be used for citrus is attached as Appendices 3.and 4.1 to this Manual. The cover sheet will need to be amended for other commodities.

6.3. Crop Monitoring Services

Growers may use the services of AQIS registered commercial crop monitors/ for field monitoring purposes.

Growers must still maintain spray control diaries to show corrective actions applied to the property but will not have to maintain monitoring diaries.

Commercial crop monitors, providing services under the New Zealand BQA will be approved and registered by AQIS (Application Form see Appendix 13). The Senior Inspector within each Region will be responsible to assess each application based on the persons knowledge of each industry, experience in pest control, knowledge of chemicals and ability to advise growers.

Commercial crop monitors who provide services to registered BQA growers must have a good knowledge of all quarantine pests and weed seeds that are listed in MPL's (BQA Appendix, 2 and Section 6 of this manual). Advisors when recommending corrective action (controls/sprays) must only recommend sprays/chemicals from the "Authorized agencies Spray Charts" for that commodity. Where other pests are detected requiring control measures, recommendations must be made with registered chemicals and in accordance with label instructions, and are acceptable for New Zealand maximum residue levels.

Commercial crop monitors must keep individual grower records for each grower/commodity that they provide field monitoring services for. A record of each field visit to a grower must be given to the grower together with any recommended corrective action and the crop monitor must keep a copy in their grower register. Failure to do so will jeopardise continuing registration as an approved field advisor under the BQA arrangements.

Commercial crop monitors must advise AQIS immediately should a BQA registered grower be found not to be complying with the requirements or conditions of property hygiene.

Commercial crop monitors will make all BQA registered grower property records available for AQIS/MAF audit when required to do so. AQIS 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.

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 with non-recommended or unregistered chemicals

6.4. Packinghouse Responsibilities

6.4.1. Registration

The requirements for registration of packinghouses for the New Zealand BQA arrangement will be those contained in the draft "Functional Standards for Fresh Fruit and Vegetable Establishments" 1992. Agreed areas of non-compliance with these standards will be defined, with a timetable of corrective action in writing between the packinghouse and AQIS.

Packinghouses wishing to be registered under the BQA will make annual application for registration under individual commodity groups and will make application for registration as per Appendix 5 of this Manual. The appropriate registration fee will be paid, prior to registration being approved, as required under the Export Control (Fees) Orders.

Packinghouses who intend to pack produce for export to New Zealand will have available at all times a copy of the BQA and relevant Sections of this Manual.

Packinghouses packing for export to New Zealand will include their registration identification on all packages.

Packinghouses will only source fruit for packing for New Zealand from growers currently registered for that commodity under the BQA .

6.4.2. Grower Identification

The produce submitted for packing from any grower will be correctly and legibly marked at all times whilst in the packinghouse. The final packed product will have included in the trade description the details of the grower by way of registered growers number or a discrete pallet code number and the registered number of the packinghouse.(See Note under Section 6.2.1.).

New Zealand produce will be kept segregated from all other general market produce whilst in bulk or in packed state. The produce will be clearly marked 'For New Zealand' or other similar wording so as it can be clearly identified by all packinghouse staff.

6.4.3. Grower end-point inspection

Under the two 'end-point' inspection systems, AQIS will perform individual grower line inspections. Whilst 'in-line' quality control records during the packing of such products is desirable it is not mandatory.

For 'process production' and 'Certification Assurance' systems the Exporter, or their appointed delegate, shall perform either 'in-line' or 'end point' inspection of each grower line.

Records of the 'in-line' quality checks will be kept and made available on request to an authorized AQIS Officer.

'End point' inspection will consist of either a 600, 950 or 1250 Unit sampling in accordance with procedures outlined in this Manual and full records of all inspections will be retained by the Establishments and made available to an AQIS authorized Officer on request.

Following Exporter end point grower inspections the exporter may consolidate the produce contained under any one commodity line (i.e. cucurbits) to present to AQIS for inspection as a 600, 950 or 1250 unit consignment sample in accordance with inspections undertaken by the exporter or the exporter delegate.

6.5.1. Operation Requirements

Packinghouses are responsible for ensuring that growers identification numbers are marked on all packages relating to that grower. It is permitted, where packinghouses are able to do so, to apply discrete pallet codes in lieu of growers numbers, but packinghouses will have accurate systems in place that will identify the grower/growers for trace back purposes.(See Note under Section 6.2.1. of this Manual).

Packinghouses will have an adequately documented receival system to enable easy identification of New Zealand registered growers product.

Packinghouses packing avocados for New Zealand will comply with the requirements contained in Section 12 of this Manual for the treatment and packing of avocados with SBV area freedom status.

CA accredited packinghouses will audit growers who have filed a completed "Declaration of Intent to Export ", and all audit details will be retained on growers application for registration files and will be made available to AQIS officers when ever required.

Identification and segregation of grower lines will be maintained throughout the packing process.

Packinghouses used by many growers should have a system in which BQA prescribed goods are identified on both ends of a bulk pallets or bins/crates. Whilst this is not mandatory, an inspector must be satisfied that methods used, will prevent any non-BQA commodities being accidentally entered into the BQA packing programmes.

Where BQA commodities are subjected to fungicidal dip or spray treatments on receipt into a packinghouse, the packinghouse will have a system which identifies the fruit/vegetables so treated. Packinghouses involved in these types of programmes will record types of fungicides, concentration rates and times at which such fruit/vegetables were treated by dip/spray. Treated prescribed goods belonging to BQA programmes will be kept adequately segregated from all other fruits/vegetables not belonging to such programmes.

Before handling BQA prescribed goods, the packinghouse will have thoroughly cleaned the processing areas of all other fruits/vegetables, all debris and waste of other such fruits and vegetables, because of the risk of cross contamination/infestation to BQA fruits/vegetables.

Packinghouses will ensure that all relevant staff are advised when they are packing commodities covered by the BQA. Ideally charts showing relevant pests, disease and weed seeds (if appropriate) should be prominently displayed. Packinghouse staff must have a sound knowledge of the relevant pests, disease and weed seeds and packinghouse rejection procedures. Inspectors must be assured that all staff involved in the sorting, grading and packing of BQA prescribed goods know the tolerances which apply to specific commodity for pests disease and contaminants.

Quality control records for New Zealand packs will detail fruit packed by grower number, condition of the produce and infestation levels if necessary and the corrective measures applied to meet the conditions of the BQA and the contents of this Manual.

In areas which do not have fruit fly free status, produce found to have insect stings or rots will be cut to ensure no evidence of egg or larva is found. Quality control (QC) records will be kept detailing grower number, amount of fruit cut and the result, even if cleared. The use of a lens is required when assessing cut fruit and such work will be performed by the QC officer or under his/her supervision. Inspectors will ensure this procedure is being carried out and documented whenever fruit is being packed for BQA programmes.

6.5.2. Registered Establishments - Operational Hygiene

Establishments registered for packing prescribed goods under the BQA arrangements will at all times comply with the operational hygiene requirements of the EC(FF&V)O's and the Functional Standards for Fresh Fruit and Vegetable Establishments Code of Practice October 1992.

6.6.1. Inspection Requirements

Compliance with the Inspection Tolerance Table (Section 1 of this manual) will be inspected for and fully recorded by Packinghouse Manager or Quality Controller using one of the following methods:

6.6.2. Under Certification Assurance Arrangements (CA)

Under CA arrangements, establishments have their own quality systems which identify defective product throughout the production and packaging processes, and which ensure that all product meets nominated phytosanitary or other requirements. Instead of inspecting each export consignment, AQIS audits the quality systems operating at the individual establishments.

All conditions and requirements as stipulated in the Certification Assurance Arrangements System Manual QMP - SM-01 will be complied with at all times.

A designated Quality Controller will examine a pre-determined number of fruits/vegetables taken from the packing line at a regular interval. The size of each sample and the regularity will be at the discretion of the Quality Controller, however the lot must be made up of a single commodity, will be identifiable and a minimum of 600* units will be inspected from each lot. **Each unit within the sample will be inspected and details fully recorded using the guidelines in Appendix 6. Representative lot sampling can be attained using Table 2 as a guide.**

TABLE 2
DETERMINING SAMPLE SIZE

	No of Fruits	Per	Over time	Total
(a)	100	1/2 hour	3 hours	600*
(b)	200	hour	3 hours	600*
(c)	100	hour	6 hours	600*

* Example only – 450 or 950 Unit samples are permitted depending on sampling regime allowed and the rate being declared prior to inspections commencing.

The periods over which samples are taken constitutes the lot to be inspected, and, on which the accept/reject decision is made. The time of commencement and the cessation of lot packing must be recorded as is the sampling method used. These records must be fully detailed and available for audit by AQIS/MAF officers. Lots must be kept segregated. Lots determined by inspection as not conforming with the MPLs, will not be permitted for export to New Zealand.

6.6.3. Packinghouses not on an approved Certified Assurance Arrangement.

A Packinghouse will have a designated Quality Control Officer/Supervisor who will be responsible for ensuring all relevant staff are aware of their responsibilities.

Packinghouse inspection staff are required to inspect fruits/vegetables for the presence of fruit fly symptoms (bruising, soft spots, stings etc) and for infestation by other quarantine pests/weed seeds and reject such fruit accordingly.

During inspection of produce for compliance with BQA requirements any fruits which show signs of rots/stings will be cut to check for fruit fly infestation.

All fruits cut, will be recorded on inspection reports showing the results of the examination.

Whilst grower line sample inspections are not required to be performed at packinghouse level (unless the exporter has delegated this responsibility) records will be kept of any fruit/vegetables rejected for infestation with quarantine pests/weed seeds, the grower and the quantities infested.

6.7. Isolation of Rejected Produce all Registered Packinghouses

If a packinghouse detects fruit flies or possible fruit fly infestation at any time during the packing of a growers lot, all produce from that grower lot both packed and unpacked will be effectively isolated then removed from the premises at the earliest opportunity.

Isolation of an affected growers lot in a common coolroom, fumigation tent or chamber on the premises, where produce from other growers registered to export to New Zealand (and could be stored,) is not permitted unless a physical barrier such as a well secured tarpaulin or plastic sheeting completely covers the fruit to be isolated.

The packinghouse will advise at the earliest opportunity, by fax or in writing, the AQIS officer in that region of a fruit fly detection and the grower involved.

The packinghouse will also advise the AQIS officer in that region at the earliest opportunity of product supplied by a grower, that is heavily infested with quarantine pests or weed seeds, so that AQIS can perform a grower audit and endeavour to establish the reasons for such contamination.

6.8. Rules for Failure

AQIS inspectors will consider "suspension" of any packinghouse which fails to carry out any of the duties or responsibilities of the Agreement that a packinghouse has been given,

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particularly where such failures may or could cause the conditions of the Agreement to be breached.

All elements mentioned within this section are integral to the Agreement and will be monitored/audited together with the following:

- . Construction of establishment - should conditions change (ie storm and tempest damage, vandalism.)
- . Hygiene and operating conditions - a deterioration of good housekeeping, unclean drains or equipment which could cause pest or vermin infestation or build up.
- . Improper, incorrect or no record keeping - during packing operation.
- . Improper or no segregation of produce packed for New Zealand and other produce for other purposes.
- . Improper or no identification of produce packed for New Zealand and other produce for other purposes.

Breaches of any of the above items may not result in suspension, where the inspector is satisfied, that immediate and appropriate corrective action has been/will be implemented.

Breaches of any of the above, where a manager/operator refuses to initiate immediate corrective action will cause suspension of the packinghouse for New Zealand protocol.

Should an inspector find an establishment in breach of the terms of the Agreement, the inspector will immediately fill out "Suspension Notice" Appendix 11 and give a copy of this form to the Packinghouse Manager/Operator immediately suspending their operations for New Zealand. The Inspector will immediately (preferably by fax) advise the State Office of the suspension and State Office will advise appropriate exporters that the packinghouse has been suspended.

A packinghouse under suspension for any of the above reasons may re-apply for registration for the New Zealand programme at any time and will be subject to inspection audit requirements as contained in this Manual before a re-instatement is permitted.

Subject to a satisfactory audit being conducted the packinghouse may be re-registered under the BQA.

6.9.1. Requirements for Exporters

Exporters wishing to export BQA commodities to New Zealand will be registered by AQIS to do so. Application for "Registration and Inspection Responsibilities" is attached as Appendix 7.

Copies of the above named registration forms will be collated by State Offices.

The identity of the exporter will be included on all packages covered by the BQA.

Exporters are responsible for ensuring that all products presented for inspection by AQIS, have been produced by registered growers and packers and that all the requirements of the BQA and this Manual have been complied with.

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 produce has been produced and packed according to the conditions prescribed in the Agreement between AQIS and MAF concerning the access of (insert commodity) into New Zealand from Australia"

Growers Name.....No:.....

Packers Name.....No:.....

Exporter requirements for post treatment security, records of condition etc are contained in Section 9 of this Manual.

6.9.2. Exporter Inspection

Where growerline inspections are performed by the Exporter full details of the inspection performed will be recorded by that person using the "Inspection Record" form attached Appendix 6.

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.

Grower line inspections ensure homogeneity if co-joined for consignment shipments for the purpose of AQIS inspection and certification.

Export inspection is not required for packinghouses who have an accredited CA arrangement with AQIS.

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

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 audit.

6.9.3. 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.

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

Any person/s who are delegated the responsibility for undertaking exporter inspections must have the ability to identify those pests and weed seeds (if applicable) 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 where appropriate.

All inspections performed by exporter delegated persons will be recorded on an "Inspection Record" and held on file by that delegate.

6.10. Isolation Procedures for Rejected Produce

Should an exporter or exporters' delegate during inspection of produce, detect fruit fly or possible 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 what action they are taking to ensure there is no cross contamination of other BQA produce.

AQIS inspectors will formally advise grower/s in writing, that they are suspended from the NZ programme pending further investigation.

6.11. Rules for Failure

Should an exporter be found at any time to:

- have accepted produce from an unregistered grower or packinghouse and present such produce to an AQIS Officer for clearance under the BQA
- be not carrying out the exporter inspection in conformity with set procedures/requirements
- have delegated responsibility to a nominated person who is not carrying out exporter inspection in accordance with set procedures/ requirements
- not be keeping adequate or accurate records of all inspections carried out by the exporter or their delegate
- present any commodity for inspection which has not been produced or packed in accordance with the requirements of the BQA or this Manual