FINAL IMPORT RISK ANALYSIS OF THE IMPORTATION OF FRUIT OF YA PEAR (Pyrus bretschneideri Redh.) FROM THE PEOPLE'S REPUBLIC OF CHINA (HEBEI AND SHANDONG PROVINCES)

DECEMBER 1998



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It is my determination that the importation of fruit of ya pear (*Pyrus bretschneideri* Redh.) from the People's Republic of China (Hebei and Shandong Provinces) will be permitted subject to the application of phytosanitary requirements as specified in Section 6 of this final import risk analysis paper. These requirements maintain Australia's appropriate level of protection and accord with Australia's international rights and obligations under the Agreement on Application of Sanitary and Phytosanitary Measures.

Paul Hickey Executive Director

December 1998



Acknowledgments

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1. AUSTRALIAN QUARANTINE AND INSPECTION SERVICE'S POSITION

Subject to the application of the appropriate phytosanitary requirements (given in full in Section 6 of this document) the Australian Quarantine and Inspection Service (AQIS) approves the importation of ya pear fruit from the designated export areas (Xinleitou, Lujiazhung and Jinma (Botou)) in Hebei Province and Shandong Province in the People's Republic of China, provided the areas meet AQIS requirements annually.

2. EXECUTIVE SUMMARY

AQIS received an application from China's Administration of Animal and Plant Quarantine (CAPQ) (now State Administration of Entry and Exit Inspection and Quarantine (SAIQ)) to import ya pear fruit from two designated export areas (Xinleitou and Lujiazhung) in Hebei Province in the People's Republic of China in April 1991. At the request of CAPQ, Jinma (Botou) in Hebei Province and Shandong Province were included as additional designated export areas in 1997 and 1998 respectively. The application was subjected to an import risk analysis (IRA), based on the relevant International Standards for Phytosanitary Measures (ISPM) and other standards being developed by the Secretariat of the International Plant Protection Convention (IPPC) of the Food and Agriculture Organization (FAO) of the United Nations.

Risk Identification

The IRA process took into account factors such as the biology, host range, distribution, entry potential, establishment potential, spread potential, and economic damage potential of the pests and diseases that may be associated with ya pear fruit. The risk analysis (AQIS, 1997a) identified 18 quarantine pests and diseases of concern to Australia that have a significant risk of being associated with ya pear fruit. The 18 quarantine pests and diseases are identified as either not present in Australia or present but under official control. The risk analysis identified management procedures which could reliably reduce the risk of these pests and diseases being associated with ya pear fruit imported into Australia to a negligibly low level.

An additional disease, *Erwinia amylovora* (fire blight), was identified as being of concern to Australia if the disease was present in China. Fire blight is not present in Australia (it was detected in the Melbourne Royal Botanic Gardens, Australia in 1997 and is now considered eradicated). Fire blight has previously been recorded in China with the most recent report being 1959, however internationally recognised researchers indicate these reports to be from unconfirmed records (van der Zwet and Keil, 1979). Furthermore, fire blight is not currently considered to be present in China (van der Zwet, 1996). However, fire blight has not been specifically targeted in annual disease surveys in China and its abscence from China needed to be confirmed. Confirmation was provided by an Australian specialist plant pathologist who visited the designated ya pear export areas in China specifically to inspect for diseases, 21-25 September 1998. The specialist did not find fire blight. The risk analysis identified phytosanitary measures that will demonstrate area freedom from fire blight in the designated export areas.



After consideration of the other 18 pests and diseases, and stakeholder consultation, AQIS has concluded that the risk posed by these pests and diseases could be managed with appropriate phytosanitary requirements. The measures proposed to address the risk posed by these pests and diseases are set out below.

Risk Management

The following risk management procedures are determined to be appropriate to reduce the likelihood of the quarantine pests and diseases being associated with fruit to negligible levels.

Eleven of the identified quarantine pests and diseases can be managed through routine phytosanitary procedures, orchard control measures and inspection methods. These pests and diseases are: *Adoxophyes orana* (reticulated tortrix), *Aphanostigma iakusuiensis* (powdery pear aphid), *Cacopsyllya pyrisuga* (pear wood psylla), *Carposina sasakii* (peach fruit moth), *Cydia inopinata* (Manchurian fruit moth), *Ectomyelois pyrivorella* (pear fruit moth), *Grapholita molesta* (Oriental fruit moth), *Panonychus ulmi* (European red mite), *Pseudococcus comstocki* (Comstock mealy bug), *Rhynchites coreanus* (pear leaf weevil), and *Tetranychus viennensis* (hawthorn red spider mite). The risks posed by these pests and diseases must be managed with the following procedures, or equivalent measures: orchard registration, pest surveillance and management programs, bagging of fruit, joint preclearance inspection and phytosanitary certification (see Section 6-Phytosanitary Requirements, Items 1, 2, 5, 7 and 8).

Seven of the quarantine pests and diseases require additional specific management strategies and phytosanitary requirements due to their biological properties, including pathogenicity, extent of host range, potential impact and difficulty of detection. These pests and diseases are: *Alternaria gaisen* (black spot), *Bactrocera* spp. (fruit flies), *Botryosphaeria berengeriana* f.sp. *piricola* (physalospora canker), *Euzophera pyriella*, *Gymnosporangium asiaticum* (Japanese pear rust), *Monilinia fructigena* (brown rot), and *Venturia nashicola* (pear scab). The following additional management strategies, or equivalent measures, must be used to manage the risk posed by these pests and diseases: monitoring and detection surveys, area/orchard freedom and disease latency tests (see Section 6-Phytosanitary Requirements, Items 2, 4 and 6).

Requirements for *Erwinia amylovora* (fire blight) or related species, involve detection surveys and area freedom, or equivalent measures. An Australian specialist plant pathologist who visited the designated ya pear export areas in China specifically to inspect for diseases, 21-25 September 1998, did not find fire blight. SAIQ will demonstrate area freedom by surveying for this disease in production areas.

The additional management strategies of monitoring and detection surveys, area/orchard freedom and disease latency tests are shown in the following table.



Pest or Disease	Detection/	Area/Orchard	Disease Latency
	Monitoring Survey	Freedom	Tests
fruit flies			
Euzophera pyriella			
black spot			
Japanese pear rust			
brown rot			
physalospora canker			
pear scab		$\sqrt{(\text{at blossoming})}$	
fire blight			

An Australian plant pathologist with extensive experience with these diseases visited the production areas in September 1998. The purpose of visit was to survey the orchards for pests and diseases of quarantine concern to Australia, audit disease survey results and initiate latency tests, or equivalent measures. The pathologist reported that the level of disease and arthropod pest control in all export areas appeared good, with the exception of Lujiazhung which had experienced severe hailstorm damage in late August 1998. Registered export areas must meet AQIS requirements annually before AQIS will allow export of fruit from those areas; orchards from the Lujiazhung area will not be allowed to export fruit from the current season. If in subsequent years fruit is to be exported from new areas, a similar visit by a plant pathologist will be required. Additionally, an AQIS inspector will visit China each year of trade for pre-clearance inspection in both the field and packing house.

In the event of quarantine pests and diseases being detected at pre-clearance in any export 'lot', all fruit from orchards comprising that 'lot' must be rejected. If any pests and diseases subject to an area freedom requirement are detected, imports will cease immediately pending the outcome of an investigation.

AQIS is satisfied that importation of ya pear fruit under the specified conditions will present negligible risk to the environment and accordingly that the obligations arising from the Administrative Procedures made under the Environment Protection (Impact of Proposals) Act 1974 have been met.

Implementation

AQIS will develop an arrangement with SAIQ based on these requirements, and outline the phytosanitary requirements for the importation of Chinese ya pear fruit. AQIS's Animal and Plant Programs Branch (APPB) together with AQIS's Plant Quarantine Policy Branch (PQPB) will develop a checklist and document an inspection procedure for field, packing house and pre-clearance inspection. APPB will ensure implementation of import conditions, audit the program and (jointly with PQPB), monitor field controls of pests and diseases of quarantine concern, trapping data, test data and inspector's visit reports. Phytosanitary requirements for the importation of ya pear fruit from China must be reviewed at the end of the first year of trade.



3. BACKGROUND

The importation of fruit of ya pear (*Pyrus bretschneideri* Redh.) was initially proposed by China's Administration of Animal and Plant Quarantine (CAPQ) (now State Administration of Entry and Exit Inspection and Quarantine (SAIQ)) in April 1991.

On receipt of all relevant application requirements, AQIS commenced an IRA in 1996 in accordance with the relevant International Standards for Phytosanitary Measures (ISPM) (ie. *Reference Standard*, *Principles of Plant Quarantine as Related to International Trade ISPM No. 1 FAO*, 1995; *Part 1-Import Regulations, Guidelines for Pest Risk Analysis ISPM No. 2 FAO*, 1996; and other standards being developed by the Secretariat of the International Plant Protection Convention (IPPC) of the Food and Agriculture Organization (FAO) of the United Nations). Pests and diseases of quarantine concern and proposed management options were identified in the IRA document, *Pest Risk Analysis of the Importation of Ya Pear (Pyrus bretschneideri Redh.) Fruit from the Hebei Province in the People's Republic of China* (AQIS, 1997a).

AQIS developed a draft IRA entitled *Discussion Paper and Phytosanitary Requirements on Pest Risk Analysis of the Importation of Ya Pear Fruit from Hebei Province in the People's Republic of China* (1997b) summarising pests identified in the IRA requiring specific management and inspection procedures. This document was circulated for stakeholder consultation on 31 July 1997. At the same time draft IRAs for the importation of Korean pear from the Republic of Korea and Fuji apples from Japan were also circulated. Comments were requested by 15 September 1997 and the date was later extended to 31 October 1997 at the request of several stakeholders. Notification of the proposed importation was provided to the World Trade Organization (WTO) as part of the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

In this document the term Import Risk Analysis is synonymous with the term Pest Risk Analysis defined in the *Glossary of Phytosanitary Terms* (1997).

4. STAKEHOLDER CONSULTATION

AQIS sent the draft IRA to 70 stakeholders and received 23 written comments (Section 10-List of Respondents). These comprised 10 from industry groups representing growers, 7 from Australian State Departments, 2 from Commonwealth Departments, 3 from research organisations and 1 from CAPQ (SAIQ).

In summary:

- Seventeen respondents either supported or did not oppose the importation under requirements proposed in the draft IRA; however many suggested modification to the import conditions proposed in the draft IRA. The matters raised by respondents are discussed in Section 9-Issues Raised by Stakeholders in Response to AQIS's draft IRA.



- Six respondents opposed the importation on the grounds that the risk of exotic pests and diseases entering Australia and causing economic and environmental damage would be too great.

- No pests additional to those listed in the draft IRA were identified by the respondents. On the basis of information provided by one respondent the quarantine status of two pests was changed (Section 9-Issues Raised by Stakeholders in Response to AQIS's draft IRA, Issue 6).

5. SUMMARY OF IMPORT CONDITIONS

The following conditions, or equivalent measures, are required for importation of fruit of ya pear from China.

- registration of export orchards
- pest surveillance and management programs in the production areas
- inspection at blossoming (petal tests)
- bagging of fruit
- fruit fly monitoring
- area freedom from specified pests and diseases
- audit of available disease survey data
- pre-harvest visit by Australian plant pathologist
- disease latency infection tests
- pre-harvest inspection of orchards and packing houses by AQIS inspector
- pre-clearance inspection jointly by SAIQ and AQIS
- phytosanitary certification jointly by SAIQ and AQIS
- verification of certification of consignment in Australia

Fruit will not be permitted into Western Australia as apples and pears from any source are currently prohibited entry under WA State legislation. However, there will be no restrictions imposed by AQIS on other ports of entry.

To address the issues raised by the lack of complete survey data and possible latent infection on fruit AQIS has altered several conditions which were referred to in the risk analysis. The principal changes are:

- pre-harvest visit by Australian plant pathologist in the first year of trade
- disease latency infection tests
- pre-clearance inspection jointly by SAIQ and AQIS
- removal of requirement for on-arrival inspection of fruit

The revised phytosanitary requirements for the importation of ya pear fruit are given in Section 6-Phytosanitary Requirements.



6. PHYTOSANITARY REQUIREMENTS

The following requirements are to be implemented for the first year of trade (the conditions are to be reviewed at the end of the first season of export of ya pear fruit to Australia).

Item 1. Registration and submission of information

Ya pear fruit for export to Australia must be sourced from SAIQ registered orchards in designated export areas and be packed in SAIQ registered packing houses in the designated export areas. SAIQ must register all export orchards and packing houses. All individual export orchards must be numbered to enable trace back in the case of non-compliance. Maps showing the location and registration number of each export orchard and packing house are to be provided to AQIS by SAIQ when test results for brown rot, black spot and pear scab are sent before commencement of trade.

Item 2. Pest management program and general surveillance

SAIQ must ensure that export orchards are subject to field sanitation and control measures against quarantine pests and diseases in List 1 (Section 8-Revised Summary of Quarantine Pests with High Risk Potential for Australia). These controls must provide regulatory assurance that export orchards are essentially free from pests of quarantine concern to Australia. Details of the pest control program must be provided to AQIS by SAIQ before commencement of trade. SAIQ must provide a revised copy of the pest management program at pre-clearance inspection to the AQIS inspector if there is any change to the pest control program.

Detection/monitoring surveys for pests and diseases must be conducted by SAIQ in orchards registered for export within the designated areas. SAIQ will submit the results using a standard reporting format to AQIS. These pests and diseases must include fruit flies (*Bactrocera* spp.), *Euzophera pyriella*, brown rot (*Monilinia fructigena*), black spot (*Alternaria gaisen*), pear scab (*Venturia nashicola*), Japanese pear rust (*Gymnosporangium asiaticum*), physalospora canker (*Botryosphaeria berengeriana* f.sp. *piricola* (syn. *Physalospora piricola*)), and fire blight (*Erwinia amylovora*) or related species. If any other exotic pest or disease of quarantine concern to Australia is detected them AQIS Canberra office must be notified immediately for appropriate action to be taken.

SAIQ must ensure that telial hosts (*Juniperus chinensis*, *J. procumbens*) of Japanese pear rust (*Gymnosporangium asiaticum*) within 2 km of registered orchards are removed. If Japanese pear rust is found, fruit from the export orchards within 2km of the infected site will not be accepted into Australia.

The designated export areas must be free from fire blight (*Erwinia amylovora*) or related species. If fire blight is found SAIQ must immediately inform AQIS and imports will be suspended pending an investigation. If physalospora canker is found all fruit from orchards whose fruit comprised that 'lot' will be rejected.



Item 3. Fruit fly monitoring

The designated areas from which ya pear fruit is sourced for export to Australia (i.e. export orchards, packing houses and the surrounding area within a 5 km diameter) must have a pest monitoring system in place for fruit flies (Tephritidae). The traps must consist of cuelure, trimedlure and methyl eugenol.

The following requirements may change depending on additional information provided by SAIQ: a 1km grid of fruit fly traps is to be placed in all ya pear export orchards. The grid will have a 5km diameter (2.5km radius) with the export orchard being the centre of the grid. Each export orchard will have a minimum of 10 traps. Villages contained within the buffer zone will be trapped on a 400m grid, with a minimum of 3 traps per village. Traps will be checked every week during the warmer months of June, July, August, and September. During April and May fortnightly checking is accepted. Summary data including number and location of traps, data on trap catches, and species caught for all fruit fly traps (methyl eugenol, cuelure, and trimedlure) is to be provided to AQIS preclearance inspector.

Area freedom will be suspended when any of the following criteria are met: (1) 3 male fruit flies are trapped within 14 days within 1.2 km, (2) a mated female fruit fly is detected, (3) a fruit fly larva is found in fruit grown at the discovery point. SAIQ will notify AQIS of suspension of area freedom within 48 hours. The candidate area is monitored for 12 weeks, then area freedom status is reinstated to the parts of the candidate area which meet the area freedom criteria.

If fruit flies are detected in traps or at pre-clearance inspection area freedom will be suspended and trade will stop immediately pending the outcome of an investigation.

Item 4. Inspection at blossoming

SAIQ must inspect all export orchards and a sample of non-export orchards in and outside of the export area at blossoming. SAIQ must conduct petal testing for black spot (*Alternaria gaisen* (syn. illegitimate = A. *kikuchiana*)) and brown rot (*Monilinia fructigena*), inspect flower clusters for pear scab (*Venturia nashicola*), and will monitor the levels of pests of concern.

Petal testing for black spot (*Alternaria gaisen*) and brown rot (*Monilinia fructigena*) must be conducted as follows:

- select 5 trees at random from each orchard just before full bloom. 2) randomly select 10 flowers from each tree and incubate in air-tight containers at 23[•]C for 3 days. 3) Record the percentage of petals infected; orchards with an average of more than 0.5% petal infection of black spot at the time of blossoming will not be permitted to export fruit.
- If brown rot is detected in any export orchards in any designated export area, fruit from that export area will not be permitted entry into Australia. Brown rot monitoring must include general inspection of export orchards and specific monitoring of designated trees (1 tree per 100 trees in export orchards). The flowers of designated trees must be inspected thoroughly for brown rot based on existing procedures.

The flower cluster samples picked for black spot assessment should also be inspected for pear scab (*Venturia nashicola*) before they are incubated. Orchards infected with pear scab at the time of



blossoming will not be permitted to export fruit.

The results of petal testing and flower cluster inspection must be provided to AQIS Canberra office by SAIQ as soon as they are available.

Item 5. Bagging of fruit and storage

Bags must be placed over fruit when the fruit is no more than 2.5 cm in diameter. Fruit must be protected by bags to minimise the risk of exposure to diseases and pests. Export fruit must be clearly identifiable from domestic fruit. Only fruit with intact bags will be permitted for export to Australia and this fruit is not to be mixed or stored with non-export fruit. No fallen fruit is to be collected for export.

Item 6. Pre-harvest inspection

Joint inspection by SAIQ and the AQIS inspector before harvest must ensure that field control programs are efficacious. The inspection must ensure that bags are intact, only bagged fruit are harvested, and that packing houses have an appropriate level of hygiene. The AQIS inspector must check inspection and sampling facilities, results of detection surveys, petal tests, flower cluster inspection, fruit fly trap records for the current season and traps if appropriate, and will determine the need to change the intensity of inspection at pre-clearance if necessary.

An Australian plant pathologist will also visit in the first year of trade to conduct a survey for pests and diseases, with an emphasis on fire blight, initiate latency tests and to audit annual disease survey data.

At pre-harvest, the Australian plant pathologist, or nominee, will initiate latency tests or equivalent measures, to test for the presence of latent disease. These tests must be conducted in the following manner:

 Randomly select 10 export quality ya pear fruit at harvest from each export orchard. Place the fruit on a raised platform in a clean container (perspex or glass) and cover with a lid. Label each container with the registered orchard number. The identity and security of each container must be maintained until the conclusion of the experiment. 2) Randomly select an appropriate number of fruit which are not bagged to be used as controls. This fruit is incubated in the same manner. 3) Add water to the container to maintain high humidity. Ensure that fruit is not in direct contact with water. Place the containers in an incubator or an air-conditioned room at 25±2°C for 21 days. 4) Inspect fruit during the incubation period for disease symptoms and record the number of fruit infected and the export orchard number. Isolate the pathogens from fruit showing disease symptoms and confirm the identity, taking care not to contaminate the remaining fruit.

Results of latency tests should be forwarded to AQIS as soon as possible .

Item 1. Pre-clearance inspection or equivalent measures

All packing houses must be registered by SAIQ. Packing houses must be situated within the area trapped for fruit flies. If movement of fruit is required from orchard to packing house through an untrapped area the fruit must remain within intact bags and be covered by a tarpaulin. Only fruit that meets export conditions, set out in items 1-6, with bags intact will be delivered to the packing house and must be identified by registered orchard number. The packing area must be well lit. Bags must



be removed in the packing house away from the packing line. During the ya pear fruit packing period to Australia, no fruit for the domestic market is to be packed at this time.

The fruit must be sampled in accordance with the agreed sampling plan (600 fruit per 'lot' containing > 1000 fruit; 450 for 1000 fruit or less), for visual joint inspection by SAIQ and AQIS inspectors with the AQIS inspector determining the acceptance or rejection of fruit. Only mature, unblemished fruit may be selected for export and the inspection procedures must ensure that the ya pear fruit is free from pests or diseases of concern to Australia and any live insects, mites, leaves, twigs and soil. Culled fruit will be removed from the packing house at the end of each day. AQIS and/or SAIQ may further examine culled fruit for pests. Action must be taken on all quarantine pests if detected and all pests detected will be identified to species level by SAIQ technical specialists, or their nominated agents, and this information forwarded to AQIS. Duplicate specimens of detected pests, if available, must be given to the AQIS inspector at the time of pre-clearance. Exports will not be permitted until the identification is completed and information sent to AQIS for approval.

An inspection 'lot' is all pear fruit harvested and packed for export to Australia each day by each orchard ("grower") or as otherwise agreed by AQIS and SAIQ. If an inspection 'lot' is rejected due to pests or diseases in List 1. Quarantine Pests with a High Risk Potential for Australia, Final IRA, Section 8, any more fruit from that 'lot' must be withdrawn from further inspection. If an inspection 'lot' is rejected due to quarantine pests or diseases with a low or moderate risk potential for Australia (Final IRA, Section 7. Pests Associated with ya pear in China - Table 1), the offending grower's fruit will be removed from the 'lot', and the balance of the consignment reinspected in accordance with the sampling plan. Fruit from the failed grower may be reconditioned and reinspected. A registered orchard which has one rejection will be permitted to submit further 'lots' for the season but if a second rejection occurs that orchard must be withdrawn from the Australian program.

SAIQ must use new cardboard boxes and cartons. No packing material of plant origin is to be used (eg. straw), only processed or synthetic packing material can be used. When packed fruit is to be transported it must be secured using one of the following methods: 1) fruit must be packed and directly transferred into a shipping container, which must be sealed with a SAIQ seal and not opened until the container reaches its destination; 2) fruit must be packed into cartons with screened ventilation holes; the screening mesh size must not exceed 1.6mm; or 3), fruit must be packed into cartons and the pallet of cartons must be shrink wrapped in plastic.

All cartons must be marked "For Australia", labelled with 'lot' number, orchard registration numbers, packing house number, number of cartons per 'lot' and date. Alternatively, for palletised "integral" consignments which have been strapped and secured the information marked on the cartons must be provided in a pallet card. AQIS-inspected and cleared fruit for export to Australia must be stored under security and segregated from all other fruit in a cold store maintained at 1-3°C until loaded into containers.

SAIQ must ensure that records are properly kept to facilitate auditing of fruit during or after storage and that container doors are sealed after loading.



Item 2. Phytosanitary certification

Upon completion of fruit sampling and inspection, a master phytosanitary certificate is to be issued by SAIQ for each 'lot', bearing the appropriate 'lot' numbers, orchard registration numbers, packing house number, number of cartons per 'lot' and date. This document must be counter-signed and dated by the AQIS pre-clearance inspector. The phytosanitary certificate is to bear the additional declaration "Produced and inspected under the ya pear arrangement between SAIQ and AQIS".

After the AQIS inspector leaves:

- For each shipment a new phytosanitary certificate, specifying the 'lots' covered by it, cartons per 'lot' and the container and seal number must be issued by SAIQ.

- Attached to this phytosanitary certificate must be a copy of the master phytosanitary certificate jointly signed by SAIQ and the AQIS pre-clearance inspector during pre-clearance.

Item 1. Verification of consignment in Australia

AQIS reserves the right to examine relevant certification and seals at the port of arrival in Australia. If the certification does not conform or the seals on the containers are damaged, AQIS reserves the right to have the ya pear fruit returned to China, re-exported, or ordered to be destroyed. AQIS will inform SAIQ of action including any intention to suspend importation.

Item 2. Visits

An AQIS inspector must visit China in each year of trade for pre-clearance inspection, both in the field and packing house. Fees for the AQIS officer to monitor the implementation of importation requirements, surveys and/or pre-clearance inspection will be paid by the Chinese side.

An Australian plant pathologist will visit the export areas in China in the first year of trade at preharvest to conduct a survey for pests and diseases, audit annual disease survey data and initiate latency tests. AQIS reserves the right for its officer to visit China to conduct field surveys and undertake audits in subsequent years. Expenses for these visits will be met by AQIS.

Item 3. Review of requirements

The requirements must be reviewed at the end of the first season of export of ya pear fruit to Australia.



7. PESTS ASSOCIATED WITH YA PEAR IN CHINA

Table 1: Risk Potential from Pests Associated with Ya Pear in China

The species listed in the following table were identified during the risk analysis (AQIS, 1997a) as pests and diseases associated with ya pear in China. The distribution, quarantine status, assessment of risk potential and management options is shown.

Species	Common name(s)	Present in China	Present in Australia	Quarantine pest status	Association with Fruit	Risk management measure ²
					(Risk potential ¹)	
ARTHROPODS						
Acleris fimbriana	fruit tree tortrix	yes	no	Quarantine	yes	Inspection
Acronicta increta	raspberry bud moth, peach sword stripe night moth	yes	no	Quarantine	no	
Actias selene	moon moth	yes	no	Quarantine	no	
Adoxophyes orana	reticulated tortrix, summer fruit tortrix	yes	no	Quarantine	yes (high)	Inspection and management
Agrilus mali	apple wood borer, apple buprestid beetle	yes	no	Quarantine	no	
Amsacta lactinea	red tiger moth	yes	no	Quarantine	no	
Anomala corpulenta	scarab, chafer	yes	no	Quarantine	no	
Anoplophora glabripennis	longhorn, citrus borer	yes	no	Quarantine	no	
Anuraphis piricola		yes	no	Quarantine	no	
Aphanostigma iakusuiensis	powdery pear aphid, pear phylloxera	yes	no	Quarantine	yes (high)	Inspection and management
Aphis spiraecola	spiraea aphid, apple aphid	yes	yes	Non Quarantine		
Apocheima cinerarius	mulberry geometrid, poplar looper	yes	no	Quarantine	no	
Aporia crataegi	blackveined white, hawthorn butterfly	yes	no	Quarantine	no	
Apriona germari	mulberry longicorn	yes	no	Quarantine	no	

¹ Risk potential was determined from the risk analysis (AQIS, 1997a). The rating of low, medium or high was assigned on the basis of assessment of both the entry potential and the potential impact of entry of the organism.

² Pests and diseases with low and medium ratings are addressed by routine inspection procedures. Pests and diseases with a high rating cannot be addressed by inspection alone because of their biological properties (including pathogenicity, extent of host range, potential impact and difficulty of detection). These species are listed in List 1-Quarantine Pests with a High Risk Potential for Australia (see Section 8). The risk posed by these pests and diseases is reduced to negligibly low levels with a combination of inspection and management strategies which are outlined in other parts of this document



Species	Common name(s)	Present in China	Present in Australia	Quarantine pest status	Association with Fruit (Risk potential ¹)	Risk management measure ²
Archips xylosteana	apple variegated tortrix, golden variegated moth	yes	no	Quarantine	no	
Aromia bungii	red-necked longicorn, peach redneck longicorn	yes	no	Quarantine	no	
Asias halodendri	longicorn	yes	no	Quarantine	no	
Bacchisa fortunei	pear borer	yes	no	Quarantine	no	
Bactrocera dorsalis	Oriental fruit fly	yes	no	Quarantine	yes (high)	Inspection and management
Blastodacna pyrigalla	pear fruit borer	yes	no	Quarantine	no	
Bryobia rubrioculus	brown almond mite, bryobia mite	yes	yes	Non Quarantine		
Byctiscus betulae	birch attelabid	yes	no	Quarantine	no	
Cacopsylla pyrisuga	pear wood psylla	yes	no	Quarantine	yes (high)	Inspection and management
Carposina sasakii (as Carposina niponensis)	peach fruit moth, peach fruit borer, date maggot	yes	no	Quarantine	yes (high)	Inspection and management
Ceroplastes japonicus	Japanese wax scale	yes	no	Quarantine	no	
Ceroplastes rubens	red/pink wax scale	yes	yes	Non Quarantine		
Cicadella viridis	green leafhopper	yes	no	Quarantine	no	
Coccus hesperidum	soft brown scale	yes	yes	Non Quarantine		
Coccus kunoensis	soft scale, peach firm scale	yes	no	Quarantine	no	
Conobathra	lump insect	yes	no	Quarantine	no	
bifidella (as						
Militene bifidella)						
Conogethes	yellow peach	yes	yes	Non		
punctiferalis	moth			Quarantine		
Cryptotympana	blackish cicada	yes	no	Quarantine	no	
Cydia inopinata	Manchurian	yes	no	Quarantine	yes (high)	Inspection and
Didaamaaaaaaa	Iruit moth			Overentine		management
coreanus	scale, apricot	yes	по	Quarantine	по	
Dolycoris baccarum	sloe bug, berry	yes	no	Quarantine	yes	Inspection
Ectomyelois pyrivorella (=Numonia pirivorella)	pear fruit moth, pear moth, pear pyralid	yes	no	Quarantine	yes (high)	Inspection and management
Empoasca flavescens	small green leafhopper	yes	no	Quarantine	no	



Species	Common name(s)	Present in China	Present in Australia	Quarantine pest status	Association with Fruit (Risk potential ¹)	Risk management measure ²
Erythesina fullo	stink bug, yellow spot stink bug	yes	no	Quarantine	no	
Euproctis similis	browntail moth, yellow tail moth	yes	no	Quarantine	no	
Euzophera pyriella		yes	no	Quarantine	yes (high)	Inspection and management
Gastropacha quercifolia	lappet, snout moth	yes	no	Quarantine	no	
Grapholita molesta (=Cydia molesta)	Oriental fruit moth, pear small borer	yes	present, but under official control in WA	Quarantine	yes	Inspection and management
Halyomorpha picus	tree stink bug	yes	no	Quarantine	yes	Inspection
Holotrichia parallela	large black chafer	yes	no	Quarantine	yes	Inspection
Holotrichia titanis	brown chafer	yes	no	Quarantine	yes	Inspection
Hoplocampa pyricola	pear sawfly	yes	no	Quarantine	yes	Inspection
Hoshinoa longicellana	common apple leafroller	yes	no	Quarantine	yes	Inspection
Icerya purchasi	cottony cushion scale, fluted scale	yes	yes	Non Quarantine		
Illiberis pruni	pear leaf worm, pear dumpling moth	yes	no	Quarantine	no	
Janus gussakovskii	stem girdler	yes	no	Quarantine	no	
Janus piri	sawfly, stem girder, stem sawfly	yes	no	Quarantine	no	
Lampra bellula	jewel beetle	yes	no	Quarantine	no	
Lampra limbata	golden jewel beetle	yes	no	Quarantine	no	
Lepidosaphes ulmi	oystershell, mussel scale	yes	yes	Non Quarantine		
Leucoptera malifoliella	apple leaf blister moth, pear leaf blister moth	yes	no	Quarantine	yes	Inspection
Lopholeucaspis japonica	pear white scale, Japanese long scale	yes	no	Quarantine	yes	Inspection
Lymantria dispar	gypsy moth	yes	no	Quarantine	yes (high)	Inspection
Malacosoma neustria	tent caterpillar, lackey moth	yes	no	Quarantine	no	
Maladera orientalis	chafer	yes	no	Quarantine	no	
Marumba gaschkewitschii	peach horn worm	yes	no	Quarantine	no	
Monema flavescens	Oriental fruit moth	yes	no	Quarantine	no	
Myzus persicae	green peach aphid	yes	yes	Non Quarantine		



Species	Common name(s)	Present in China	Present in Australia	Quarantine pest status	Association with Fruit (Risk potential ¹)	Risk management measure ²
Nezara viridula	green vegetable bug	yes	yes	Non Quarantine		
Odites leucostola	lecithocerid moth	yes	no	Quarantine	no	
Odonestis pruni	apple caterpillar	yes	no	Quarantine	no	
Oxycetonia	citrus flower	yes	no	Quarantine	no	
jucunda	chafer					
Pandemis heparana	apple brown tortrix	yes	no	Quarantine	yes	Inspection
Panonychus ulmi	European red mite	yes	present but under official control in WA and NT	Quarantine	yes (high)	Inspection and management
Parasa consocia	green cochlid, green stinging caterpillar, green stinging caterpillar,	yes	no	Quarantine	no	
Parasa hilarata	stinging caterpillar, nettle grub	yes	no	Quarantine	no	
Parlatoria	chaff/black	yes	yes	Non		
pergandii	parlatoria			Quarantine		
Phalera flavescens	cherry caterpillar, apple boat- shaped caterpillar	yes	no	Quarantine	no	
Phlossa conjuncta	slug caterpillar, date thorn moth	yes	no	Quarantine	no	
Phyllonorycter ringoniella	apple leaf miner	yes	no	Quarantine	no	
Popillia quadriguttata	Chinese rose beetle, chafer	yes	no	Quarantine	no	
Potosia brevitarsis	bai xing hua qian	yes	no	Quarantine	no	
Proagopertha lucidula	chafer	yes	no	Quarantine	no	
Pseudaonidia dunlex	camphor scale	yes	no	Quarantine	no	
Pseudaulcaspis pentagona	peach white scale, mulberry scale	yes	yes	Non Quarantine	no	
Pseudococcus comstocki	Comstock mealybug	yes	no	Quarantine	yes (high)	Inspection and management
Psylla chinensis	pear psvlla	ves	no	Ouarantine	no	
Quadraspidiotus	San Jose scale	yes	yes	Non		
Rhynchites coreanus	pear leaf weevil, pear borer, pear curculio, pear dog	yes	no	Quarantine	yes (high)	Inspection and management



Species	Common name(s)	Present in China	Present in Australia	Quarantine pest status	Association with Fruit	Risk management measure ²
					(Risk potential ¹)	
Rhynchites foveipennis	Korean pear weevil	yes	no	Quarantine	yes	Inspection
Schizaphis piricola	pear yellow	yes	no	Quarantine	no	
	aphid, early					
	pear bud aphid					
Spilonota albicana	large apple fruit moth	yes	no	Quarantine	yes	Inspection
Spilonota lechriasnis	bud moth, apple fruit licker	yes	no	Quarantine	yes	Inspection
Spilonota ocellana	eye spotted bud	yes	no	Quarantine	yes	Inspection
Spulerina astaurota	pear barkminer,	yes	no	Quarantine	yes	Inspection
Stonhanitis nashi	nashi lace bug	VAS	no	Quarantine	VAS	Inspection
Supranthedon hector	cherry treeborer	yes ves	no	Quarantine	yes	Inspection
Telnhusa	black star leaf	ves	no	Quarantine	no	
chloroderces	roller	yes	по	Quarantine	по	
Tetranychus	hawthorn red	ves	no	Ouarantine	yes (high)	Inspection and
viennensis	spider mite	5			5 (0)	management
Thosea sinensis	coconut cup moth	yes	no	Quarantine	no	
Urochela luteovaria	pear stink bug	yes	no	Quarantine	yes	Inspection
Vespa mandarinia	paper wasp	yes	no	Quarantine	yes	Inspection
BACTERIA						
Erwinia amylovora	fire blight	Hebei and Shandong Provinces free, status in the rest of China needs confirm- ation	detected 1997 in Melbourne Royal Botanic Gardens, considered eradicated 1998	Quarantine	yes (low)	Inspection and management
FUNGI						
Alternaria alternata	black spot, Japanese pear black spot, fruit rot	yes	yes	Non Quarantine		
Alternaria gaisen (syn. illegitimate = A. kikuchiana)	black spot, Japanese pear black spot, fruit rot	yes	no	Quarantine	yes (high)	Inspection and management
Armillaria tabescens (syns. Clitocybe tabescens, C. monadelphus, Armillariella tabescens)	clitocybe root rot	yes	no	Quarantine	no	



Species	Common name(s)	Present in China	Present in Australia	Quarantine pest status	Association with Fruit (Risk potential ¹)	Risk management measure ²
Armillaria mellea (syn. Armillariella mellea)	armillaria root rot	yes	no	Quarantine	no	
Botryosphaeria berengeriana f.sp. piricola (syn. Physalospora piricola, anamorph Macrophoma malorum)	physalospora canker, wart bark, blister canker, apple ring rot	yes	no	Quarantine	yes (high)	Inspection and management
Botryosphaeria obtusa (syn. Physalospora obtusa, anamorph Sphaeropsis malorum)	black rot, limb canker, black canker	yes	yes	Non Quarantine		
Botrytis cinerea (teleomorph Botryotinia fuckeliana)	grey mould	yes	yes	Non Quarantine		
Diaporthe ambigua	canker	yes	no	Quarantine	no	
Fomes truncatospora	heart rot	yes	no	Quarantine	no	
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	bitter rot, fruit rot, ripe rot	yes	yes	Non Quarantine		
Gymnosporangium asiaticum (syns. G. haraeanum, G. chinense, G. koreaense, G. spiniferum)	Japanese pear rust	yes	no	Quarantine	yes (high)	Inspection and management
Monilinia fructigena	brown rot	yes	no	Quarantine	yes (high)	Inspection and management
Mycosphaerella pyri (syn. M. sentina)	leaf spot	yes	no	Quarantine	no	
Penicillium expansum	blue mould	yes	yes	Non Quarantine		
Phomopsis fukushii	phomopsis canker, phomopsis fruit rot, die-back	yes	no	Quarantine	yes (rarely affects fruit in storage)	Inspection
Phyllactinia corylea	powdery mildew	yes	no	Quarantine	no	
Podosphaera leucotricha (anamorph Oidium farinosum)	powdery mildew	yes	yes	Non Quarantine		
<i>Rhizopus stolonifer</i> (syn. <i>R. nigricans</i>).	rhizopus rot	yes	yes	Non Quarantine		



Species	Common	Present	Present in	Quarantine	Association with	Risk management
	name(s)	in China	Australia	pest status	(Risk potential ¹)	measure-
Trichothecium	pink rot, pink	yes	yes	Non		
roseum (syn.	mould rot			Quarantine		
Cephalothecium						
roseum)						
Valsa ambiens	valsa canker	yes	no	Quarantine	yes	Inspection
Valsa ceratosperma	valsa canker	yes	yes	Non		
(syn. V. mali,				Quarantine		
anamorph						
Cytospora sacculus)						
Venturia nashicola	pear scab	yes	no	Quarantine	yes (high)	Inspection and
(anamorph	_					management
Fusicladium						
pyrorum)						
Venturia pirina	pear scab	yes	yes	Non		
				Quarantine		



8. QUARANTINE PESTS WITH HIGH RISK POTENTIAL FOR AUSTRALIA

The following list contains pests and diseases of concern to Australia with a high entry potential and high potential impact rating. The list has been revised on the basis of information provided by respondents.

LIST 1: REVISED SUMMARY OF QUARANTINE PESTS WITH HIGH RISK OF ENTRY INTO AUSTRALIA

1. Adoxophyes orana (Fischer von Roeslerstamm), reticulated tortrix, summer fruit tortrix

- 2. Aphanostigma iakusuiensis (Kishida), powdery pear aphid, pear phylloxera
- 3. Bactrocera dorsalis (Hendel); Bactrocera spp., fruit flies
- 4. Cacopsylla pyrisuga (Forster), pear wood psylla

5. *Carposina sasakii* Matsumura (as *Carposina niponensis*), peach fruit moth, peach fruit borer, date maggot

6. *Cydia inopinata* (Heinrich), Manchurian fruit moth, apple small borer, north east apple small borer, apple-small, east small, dry-scar, black-malignant boil

7. Euzophera pyriella Yang

8. *Ectomyelois pyrivorella* (Matsumura) (*=Numonia pirivorella*), pear fruit moth, pear moth, pear pyralid

9. Grapholita molesta (Busck) (=Cydia molesta), oriental fruit moth, pear small borer

10. Panonychus ulmi (Koch), European red mite

11. Pseudococcus comstocki (Kuwana), Comstock mealybug

12. Rhynchites coreanus Kono, pear leaf weevil, pear borer, pear curculio, pear dog

13. Tetranychus viennensis Zacher, hawthorn red spider mite

14. *Alternaria gaisen* Nagano (syn. illegitimate = *Alternaria kikuchiana* Tanaka), black spot, Japanese pear black spot, fruit rot

15. Gymnosporangium asiaticum Miyabe ex Yamada, Japanese pear rust

16. Monilinia fructigena Honey, brown rot

17. *Botryosphaeria berengeriana* De Not. f.sp. *piricola* (Nose) Koganezawa & Sakuma, physalospora canker

18. Venturia nashicola Tanaka & Yamamoto, pear scab

The following disease has been confirmed as not present in Hebei and Shandong provinces, however its status in the rest of China requires confirmation. Due to the nature of this disease, AQIS has retained *Erwinia amylovora* on the list of quarantine pests as AQIS requires area freedom to be demonstrated annually.

19. Erwinia amylovora (Burrill) Winslow et al., fire blight



9. ISSUES RAISED BY STAKEHOLDERS IN RESPONSE TO AQIS'S DRAFT IRA

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9.1 General Issues

9.1.1 IRA process

Issue 1:

The basis of import risk analysis: is IRA based on risk of entry or risk of establishment?

AQIS's position:

AQIS conducts IRAs in accordance with the ISPM outlined in the introduction to this document. The *Guidelines for Pest Risk Analysis*, *ISPM No. 2*, *FAO* (1996) considers all risks (entry, establishment and spread) in assessing overall risk.

Issue 2 :

Effect on native flora and fauna: no examinations have been made of the impact of these exotic pests on Australian native flora and fauna.

AQIS's position:

AQIS is satisfied that importation of ya pear fruit under the specified conditions will present negligible risk to the environment and accordingly that the obligations arising from the Administrative Procedures made under the Environment Protection (Impact of Proposals) Act 1974 have been met. In addition, Environment Australia, Biodiversity Group was consulted in regard to this IRA. That portfolio was supportive of the proposed importation provided that the proposed phytosanitary conditions were adopted.

9.1.2 Equivalence between China, Japan and Korea

Issue 3:

As a result of the circulation of the three draft IRAs at the same time many comments were received from respondents regarding the differences in conditions imposed for the importation of pome fruit from China, Japan and Korea. These comments specifically addressed issues such as pest surveillance/management requirements, area freedom, disinfestation treatments, and the number and timing of visits by AQIS staff.

AQIS's position:

The conditions for importation of pome fruit from China, Japan and Korea are not exactly the same as these countries have differing phytosanitary requirements. These requirements relate to differences in disease history, disease survey results, pest management strategies, and pest occurrence. For this reason AQIS has set requirements for each country after consideration of its phytosanitary status.

9.1.3 Risk to Australian industry

Issue 4:

A number of respondents noted the need for protection of Australia's status as a producer of fruit in a relatively pest and disease free environment. Concerns were raised regarding the wide host range of the



listed pests and diseases and the greater risk of establishment this causes, the difficulty of detection, and eradication should pests become established. Rejecting the application for entry of ya pear fruit from China was suggested as a solution. The issue of China's decision on quarantine status and management conditions of Australian fruit with the same pests was raised.

AQIS's position:

The pests of quarantine concern identified in the draft IRA require specific management procedures. AQIS believes that the proposed sanitation and chemical control programs will minimise the risk of introduction of these pests of quarantine concern. The conditions for the importation of ya pear fruit SAIQ to abide by the agreed management procedures. Similar measures have been accepted by other countries for importation of ya pear fruit. Prohibition of importation of ya pear fruit is not justified by the risk analysis since appropriate management procedures can reduce the risk to negligibly low levels.

9.1.4 Australian ya pear industry

Issue 5:

Australian ya pear industry: Ya pear is grown in small commercial quantities in Australia.

AQIS's position:

AQIS accepts that commercial production of ya pear in Australia is in its infancy.

9.2 Pest Risk Assessment

9.2.1 Quarantine pest list

Issue 6:

The moth *Adoxophyes orana* was listed as having a high entry risk potential in Table 1 of the draft IRA but was not included in List 1. Pink rot (*Trichothecium roseum*) and oriental fruit moth (*Grapholita molesta*) were incorrectly classified as quarantine and non-quarantine pests respectively. The moth *Numonia pirivorella* should be listed as *Ectomylois pyrivorella*.

AQIS's position:

A. orana was inadvertently excluded from the list of pests of high risk of entry into Australia. *T. roseum* is present in Australia, therefore, under the agreed IPPC definition of a quarantine pest *T. roseum* is a non-quarantine pest. *G. molesta* is not present in Western Australia. Western Australia has legislation in place to prevent the introduction of *G. molesta* into that State on pome fruit and this legislation is recognised by AQIS. Altering the quarantine status of *G. molesta* from non-quarantine to quarantine is therefore justified. In the literature the taxonomic state of the names *Numonia pirivorella* (Matsumura, 1900) and *Ectomyelois pyrivorella* (Matsumura, 1899) has been confused. According to Inoue *et al.* (1982), *N. pirivorella* is a junior synonym of *E. pyrivorella*, AQIS has amended List 1 to this effect. The revised Table 1 and List 1 are included in Section 7 and 8 of this document respectively.



9.2.2 Arthropod pest issues

Issue 7:

The list of 19 quarantine pests (List 1) in the draft IRA needs to include a number of additional pests and identify control measures. These are Japanese long scale (*Lopholeucaspis japonica*), camphor scale (*Pseudaonidia duplex*), Korean pear weevil (*Rhynchites foviepennis*), common leafroller (*Hoshinoa longicellana*) and gypsy moth (*Lymantria dispar*).

AQIS's position:

List 1 refers to cryptic pests requiring management strategies in addition to inspection. Inspection is considered sufficient to manage the risk posed by common leafroller, gypsy moth and Korean pear weevil. Japanese long scale and camphor scale have a low and moderate risk entry potential on fruit respectively. The risk posed by these species will be addressed through inspection, and they will be considered as quarantine pests if found on fruit of ya pear and the fruit will be rejected. The proposed conditions for importation given in the draft IRA will remain as surveillance, chemical control, bagging, pre-harvest and pre-clearance inspection.

9.2.3 Disease issues

Issue 8:

Fire blight (*Erwinia amylovora*) in China: several respondents commented on the occurrence of *E*. *amylovora* in China and stated the necessity of implementing a general surveillance program similar to that required in Victoria and South Australia.

AQIS's position:

CMI Distribution Map No. 2, 1979 and IMI Distribution Map No. 2, 1993 indicate that fire blight has been recorded in China. However, the internationally recognised researchers van der Zwet and Keil (1979) indicate that outbreaks of fire blight reported on pear and apple in eastern, northern and northwestern China in 1926, 1933, and 1959 respectively, in Hopeh, Sikang in 1952 and Kwangtung in 1955, are from unconfirmed reports of bacterial diseases in fruit trees. In addition, fire blight is not currently considered to be present in China (van der Zwet, 1996). SAIQ maintains that fire blight is not present in China and regards it as a quarantine disease. Fire blight symptoms were not detected in the properties inspected in Hebei Province during the visit of the AQIS plant pathologist in 1997. It is likely that if fire blight were present in China, the symptoms of this disease would not have gone unnoticed for over 40 years since the last report of occurrence of fire blight. However, SAIQ has not specifically targeted fire blight in their annual disease surveys and it's status as a disease present in China needs to be confirmed. To rectify any likelihood of misidentification, AQIS therefore requires SAIQ to demonstrate area freedom for fire blight, or related species, by carrying out detection/monitoring surveys, or equivalent measures, in production areas (Hebei Province) and to submit results to AQIS immediately on completion. An Australian plant pathologist visited the export areas to survey for diseases and to specifically check for fire blight, or related species, in September 1998 and did not find this disease.

Issue 9:

Brown rot (*Monilinia fructigena*) and monilinia leaf blight (*Monilinia mali* f. sp. *laxa*) : what is the biological reason for testing for *M. fructigena*, but not for *M. mali*? It is not possible to determine



whether monitoring of only 1 in 100 trees for presence of *M. fructigena* is sufficient. Details of the existing procedures of flower inspection for *M. fructigena* on export orchards have not been provided.

AQIS's position:

In China *M. mali* is not recorded on pear and *M. mali* f. sp. *laxa* does not affect pear. Therefore testing is not required.

Details of petal testing for brown rot (*M. fructigena*) were given in the draft IRA. Detection surveys conducted for brown rot, in addition to the special tests performed by SAIQ, sanitation procedures to remove overwintering inoculum, chemical control programs, bagging of fruit on trees to protect fruit from infection, rejecting fruit in damaged bags, delivery of fruit with intact bags to the packing house, and joint pre-clearance inspection of fruit will minimise the risk of brown rot infection. Disease latency tests, or equivalent measures, will also be carried out against this disease. AQIS requires SAIQ to carry out detection/monitoring surveys and petal tests and provide data to AQIS to demonstrate area freedom for all orchards registered for export of fruit to Australia as SAIQ has informed AQIS that brown rot may occur occasionally in the designated export area.

Issue 10:

Black spot (*Alternaria gaisen*): what is the reason for the petal test for black spot (*Alternaria gaisen*) requiring 10 flowers from 10 trees per orchard for Korean pear but only 10 flowers from 5 trees per orchard for Chinese ya pear? What is the size of the area freedom zone for black spot?

AQIS's position:

Black spot has been sporadically detected in Hebei Province in monitoring carried out by CAPQ (SAIQ) from 1994-1998 in export orchards. CAPQ (SAIQ) has been providing data for black spot annually from 1994-98 based on AQIS requirements for the two export areas, and in 1997-98 for the third export area.

National Plant Quarantine Service in Korea (NPQS) has not provided detection survey data for black spot based on specifications stipulated by AQIS. Although NPQS has provided results of a general survey of black spot carried out from 1988-89, 1992 and 1996-98, no regular annual survey data have been provided. Therefore, the sampling size has been increased to 100 flowers (10 flowers from 10 randomly selected trees) for petal testing for Korea.

AQIS has specified that SAIQ will conduct petal tests for black spot on an agreed sampling plan at blossoming in export orchards. AQIS will not accept ya pear fruit from orchards with an average level of more than 0.5% petal infection for black spot at blossoming. Disease latency tests, or equivalent measures, will also be carried out against this disease. Area freedom is not a requirement.

<u>Issue 11</u>:

Pear scab (*Venturia nashicola*): what are the parameters for area freedom for pear scab and the time of sampling?

AQIS's position:

Export orchards have to demonstrate area freedom from pear scab at blossoming to become eligible to export ya pear fruit to Australia. CAPQ (SAIQ) has been providing detection/monitoring survey data



for pear scab annually from 1994-98 based on AQIS requirements for the two export areas, and in 1997-98 for the third export area. Flower cluster inspection for pear scab occurs at blossoming, which helps in the early detection of orchards with pear scab infection. Orchards which are infected with pear scab at blossoming will not be permitted to export fruit. AQIS has specified in this document (Section 6, Item 4) orchard freedom for pear scab at blossoming, with test results to be provided to AQIS as soon as they are available.

Issue 12:

Japanese pear rust (*Gymnosporangium asiaticum*): the requirements should be much more specific about tolerance levels.

AQIS's position:

AQIS requires the removal of alternate hosts of Japanese pear rust within 2 km of designated export orchards in Hebei Province. Monitoring surveys carried out by CAPQ (SAIQ) in 1997 indicate that Japanese pear rust has not been found within 5 km of the three export areas in Hebei Province. AQIS has specified in this document (Section 6, Item 2) that all export orchards must be free from this disease.

Rust can cause latent infection on fruit. Disease latency tests, or equivalent measures, will also be carried out against this disease. Tolerance levels for rust is nil. If Japanese pear rust is detected in pear orchards during detection/monitoring surveys or latency tests, fruit from the orchards within 2km of the infected site will not be accepted into Australia.

<u>Issue 13:</u> European canker (*Nectria galligena*): what are the risks associated with this disease?

AQIS's position:

European canker does not occur in China (CMI Distribution Map No. 38, 1985).

<u>Issue 14</u>:

Physalospora canker (*Botryosphaeria berengeriana* f.sp. *piricola*): why is there no monitoring for *B*. *berengeriana* f.sp. *piricola*? It may occur on fruit, but it needs to be detected as early as possible.

AQIS's position:

Physalospora canker is a disease mainly affecting branches. During winter, early spring and summer cankered branches are removed therefore inoculum available for fruit infection is considerably reduced. SAIQ will target this disease in their monitoring surveys and will take preventive and control measures. AQIS believes that bagging will prevent fruit infection. Disease latency tests, or equivalent measures, will also target this disease. AQIS has specified in this document (Section 6, Item 6) that export of fruit will not be permitted from orchards which show fruit infection at the time of latent disease testing and pre-clearance inspection.

Issue 15:

Latent infection on fruit: where diseases are capable of producing a latent infection which would not be detected at pre-clearance inspection, entry risk must be regarded as significant. The survey of



registered export orchards and surrounding orchards should be undertaken to guarantee freedom from these diseases.

AQIS's position:

The phytosanitary measures are designed to minimise the risk of fruit carrying latent infection. Overmature or over-ripe fruit are not harvested. Spray programs and orchard sanitation, as well as bagging will adequately protect fruit from infection caused by diseases of concern. Any fruit infected before bagging are likely to be removed during thinning (which occurs three times during the growing season) and those that develop disease symptoms within the bag will not be harvested. Fruit showing incipient infection is likely to be detected at pre-clearance inspection.

In accordance with Australian Government policy of managing quarantine risks offshore where possible, AQIS is proposing that SAIQ conduct testing, or equivalent measures, of fruit for latent disease infections in China prior to the export of fruit to Australia. During the first year of exports the Australian specialist plant pathologist visiting at pre-harvest will initiate the tests and SAIQ will conclude the assessment. The results will be forwarded to AQIS as soon as possible. In subsequent years AQIS will consider the latency tests to be SAIQ's responsibility. A set of guidelines are included (Section 6, Item 6). This testing, together with pre-clearance inspection, will replace on-arrival inspection and will further reduce any associated risk of disease entering Australia by conducting these tests in China. This ensures that the program is truly a pre-clearance inspection.

Issue 16:

Physiological races of diseases: pathogens present in Australia may have limited genetic heterogeneity and this may be important for economic management of disease within Australia and the risk of introducing pathotypes, biotypes, forms etc., must be part of the risk assessment.

AQIS's position:

As far as it can be determined, none of the diseases of quarantine concern to Australia which occur in China have physiological races. AQIS therefore has no justification to restrict entry of fruit on the assumption that some of the diseases have physiological races. Similarly no evidence is presented that in Australia the disease population is of limited diversity or that it is static.

9.2.4 General pest issues

Issue 17:

Climatic differences: Climatic differences between Australia and China in relation to the life-cycles of pests have not been adequately addressed.

AQIS's position:

Climate is not a reliable parameter to be factored into a risk management strategy as weather conditions can change between years. It is not possible to accurately predict the behaviour of a pest in another environment as this depends on a number of variables, including the climatic conditions. The tolerances of various stages of the pest, if known, also have been considered. AQIS has considered the most favourable conditions for development of the pest and the commensurate pest control activities in the field as part of the IRA. For pests of concern to AQIS the surveillance conducted by SAIQ will identify variation in pest levels due to seasonal climatic variation.



<u>Issue 18</u>:

Classification of pest distribution: in Table 1 of the draft IRA, column 3 appears to be unnecessary. It merely states that all pests listed are present in China. It would be more useful and informative if the pests were broadly stratified (+++= very common, very widespread; ++=common, widespread; += less common or common only some years; P=present, but unimportant), although many other systems would also be suitable.



AQIS's position:

AQIS will consider requiring SAIQ and the AQIS inspectors and other Australian specialists to report the level of prevalence of pests during pre-harvest inspection. The information on presence and absence was included in the draft IRA to help non-specialists understand the logical basis for the separation of pests into quarantine and non-quarantine categories. Quarantine decisions are based on *Guidelines for Pest Risk Analysis, ISPM No. 2, FAO* (1996) which incorporates entry, establishment and rates of spread in its analysis. The risk analysis also takes into account presence and prevalence of pest at harvest.

9.3 Pest Risk Management

9.3.1 Orchard registration

Issue 19:

Registration of orchards in Jinma (Botou area), Hebei Province: it is recommended that orchards in Botou area in Hebei Province be added to the list of registered orchards.

AQIS's position:

Orchards in the Botou area were included as a designated export area in 1997, but all export orchards will be required to meet standards set by AQIS for various pests and other management operations as specified in the final IRA and the arrangement document.

Issue 20:

Registration of orchards and identification of export fruit: the opportunity is left open to CAPQ (SAIQ) and ya pear growers to test all orchards and only submit registration for those which have acceptably low levels of fungal diseases. This is not the intention of the registration process. Export fruit must be identifiable by registered orchard numbers.

AQIS's position:

SAIQ will be able to selectively submit those orchards with acceptable levels of pests and diseases for registration. This will ensure that orchards exporting fruit to Australia meet AQIS requirements. AQIS requires SAIQ to provide the list of registered orchards, their numbers and their location on maps as soon as the orchards are registered, and submit petal testing, flower cluster, fruit fly trapping data etc., as soon as the results are available. AQIS has included these requirements in this document (Section 6, Item 1). Export fruit will be identifiable by registered orchard numbers.

9.3.2 Field management strategies

Issue 21:

Individual pest management strategies: the proposed import conditions are very broad and do not adequately cover specific issues as they relate to individual pests/diseases. One respondent requires that each pest or disease has it's own very detailed quarantine conditions and requirements.

AQIS's position:



Specific control measures are applicable to each of the pests of quarantine concern in List 1 of the draft IRA but individual treatment of pests is unnecessary as most management operations are applicable to a broad range of pests. Individual species control proposed in the draft IRA is based on the systems approach for pest management. No substantive data have been presented by stakeholders to indicate that the management options would not reduce populations of any pest of concern to a minimal level.

Issue 22:

Pheromone traps for lepidoptera: it is believed that there would be pheromone traps available for the most significant tortricid species of concern (*Carposina sasakii* and *Cydia inopinata*).

AQIS's position:

AQIS will not require the use of pheromones for monitoring lepidoptera since bagging is used for exclusion of lepidopteran pests. Pheromone traps will potentially attract pests from outside the export area and are not considered a suitable management option.

<u>Issue 23</u>:

Field sanitation: AQIS was asked to define the requirements for field sanitation and whether the specific details of pest control programs (equipment, volumes, records, chemicals, timing, weather) have been given to AQIS. Details of proposed control measures are required for each pest to ensure that the Australian and New Zealand Food Authority (ANZFA) standards for chemical residues will be met.

AQIS's position:

Field sanitation procedures in China carried out during winter and early spring involve removal of plant parts which harbour overwintering propagules on the tree and on the orchard floor. The excised plant parts will either be buried, burned or removed from the site. An AQIS plant pathologist visited a random selection of export orchards in the designated export areas and confirmed that orchards are well maintained and have a very high level of hygiene. Sanitation is an integral part of the disease management strategy of export orchards in Hebei Province. Sanitation methods have been specified in this document (Section 6, Items 2, 3, 4, 5, and 6).

SAIQ will provide details of chemical control programs to AQIS at the commencement of the season. SAIQ will provide a revised copy, if applicable, to the AQIS inspector at the pre-clearance inspection.

AQIS and CAPQ (SAIQ) discussed the issue of Maximum Residue Limits at the Bilateral Meeting in 1996. Pesticide residues will be monitored under the AQIS Imported Food Inspection Program.

<u>Issue 24</u>:

Bagged fruit with relation to pathogens: it is believed that more stringent monitoring of the orchards is necessary because the fruit may not be covered early enough, allowing sufficient time for spores of the pathogen to land on the fruit.

AQIS's position:

Fruitlets are exposed to fungicide applications before they are bagged. AQIS understands that pesticide impregnated bags are used. Only uninfected and apparently healthy fruit is covered by bags. Any fruit which have received inoculum and not succumbed to infection are likely to become infected within the bags and to be rejected at harvest. An AQIS inspector will inspect fruit at the pre-clearance



inspection. AQIS also requires a sample of fruit to be incubated for a specific period to detect fruit which shows latent infection before harvest.

Issue 25:

Bagging with relation to arthropod pests: several respondents commented on the lack of evidence presented in the draft IRA to support the claim that bagging significantly reduces the incidence of fruit infestation by quarantine pests which have been assessed to have high risk of entry into Australia. The draft IRA document highlights that for some pests bagging will not stop infestation of the fruit. Specific examples used were mites, mealybugs, thrips, pear fruit moth (*Ectomyelois pyrivorella*), summer fruit tortrix (*Adoxophyes orana*) and peach fruit moth (*Carposina sasakii*).

AQIS's position:

Bagging of fruit is undertaken routinely in China, Japan and Korea as a pest management measure. As a result of bagging and chemical controls, certain pests have not been seen in orchards for a number of years. Bagging has been used as a disease management method for nashi pear imports from Japan into Australia for almost a decade and a very low level of non-quarantine pests and/or diseases have been detected on fruit during pre-clearance inspections.

<u>Issue 26</u>:

Recognition of existing procedures for pest management: there are precedents set for the management of many pests which are the same or similar to those identified in the current risk assessment. There should be provision within the phytosanitary requirements document to refer to these successful management procedures.

AQIS's position:

AQIS has based its management strategies for pests of ya pear on the successful program and existing import conditions for nashi pear imports from Japan, which have resulted in a very low level of arthropod pests and/or diseases being intercepted on inspection and/or establishing in Australia.

9.3.3 Pest surveillance (survey and monitoring)

Issue 27:

Responsibility for testing for diseases: blossom testing for brown rot (*Monilinia fructigena*), pear scab (*Venturia nashicola*), and black spot (*Alternaria gaisen*) needs to be done by an experienced plant pathologist.

AQIS's position:

All disease management programs and testing for brown rot, pear scab, and black spot are conducted by SAIQ Area Agronomist and his staff under the direction and supervision of Professor Zhang Zhiming of Hebei Agricultural University. The results of these surveys will be submitted to AQIS for evaluation.

Issue 28:

Disease survey requirements: the possibility of infection of fruit will be reduced to a minimum by China's effective pest control program during the growth period, and pre-clearance inspection before export, therefore the requirement for disease surveys should be removed.



AQIS's position:

Surveys, petal testing and flower cluster inspections will have to be conducted by SAIQ annually at flowering and during the growing season, to specifications provided by AQIS and results submitted to AQIS for evaluation. The causal organisms of brown rot, black spot, Japanese pear rust and physalospora canker have the potential to cause latent fruit infection and are unlikely to be detectable on fruit at pre-clearance inspection. Results of the latent disease infection tests carried out at pre-harvest will be used to audit the efficacy of petal testing. The requirement for petal testing may be reassessed after the first year of trade.

<u>Issue 29</u>:

Assessment of information: Item 2 of the phytosanitary requirements described in the draft IRAs states that 'details of the pest control program are to be provided to the AQIS inspector...'. Who will have the responsibility to assess the adequacy of these programs?

AQIS's position:

The details of the pest control program are provided by SAIQ to AQIS Canberra Office. A copy of the details, with changes, if any, would be given to the AQIS inspector before the pre-clearance orchard inspection. AQIS Canberra office will consult with State quarantine plant pathologists and quarantine entomologists, if necessary, to determine the adequacy of pest control programs.

9.3.4 Area freedom

Issue 30:

Area freedom with regard to fruit flies: should monitoring be included for fruit flies as they are not reported from this part of China?

AQIS's position:

Bactrocera dorsalis (Hendel) is recorded from southern China (White & Elson-Harris, 1992). Due to the lack of internal quarantine controls in China the export orchards in Hebei Province must be trapped for verification of this pest. If SAIQ supplies additional information regarding internal quarantine controls these requirements may be altered. Details are given in Section 6, Item 3.

Issue 31:

Export regions nominated by China: are the regions and provinces nominated to export fruit chosen because they are free of fruit flies and *Euzophera pyriella*, or is this the only area that the fruit is grown? If freedom is by area only, the safeguards which are in place to ensure against incursions should be documented.

AQIS's position:

AQIS is of the understanding that Hebei Province is the main pear production area. The two pests mentioned are not recorded in Hebei Province but AQIS requires detection surveys for *E. pyriella* and trapping for fruit flies to verify the maintenance of this area freedom. AQIS will approve trap placements, density, trap type and servicing and the survey requirements for *E. pyriella* based on detection surveys as included in the *Guidelines for Surveillance ISPM No. 6, FAO*, 1997 (refer to Section 6, Item 3). The low pest prevalence status of Hebei Province was considered by AQIS in agreeing to assess the importation of ya pear. AQIS has specified in this document (Section 6, Item 3)



the notification requirements for fruit fly and *E. pyriella* which will be based on *Pest Surveillance*, *Requirements for the Establishment of Pest Free Areas ISPM No. 4, FAO*, 1996.

<u>Issue 32</u>:

Area freedom: respondents queried the area freedom status of regions in China. Specific questions were asked on the following issues: the definition of area freedom; the distance from the nearest occurrence of a disease of major concern (eg. fire blight, brown rot); the level of surveillance required to define the occurrence and distribution of disease in the exporting country; the definition of an orchard; whether a registered and an unregistered orchard can adjoin each other; the requirements for buffer zones and whether there were movement restrictions on quarantine risk materials into the export areas.

AQIS's position:

The area referred to in area freedom may be an official country or part thereof. Area freedom is defined at levels from orchard to country depending on the pest or disease concerned. The definition of area freedom for each pest of concern is included in this document (Section 6 - Phytosanitary Requirements). An orchard is an area of production which operates as a single unit, with the same pest management practices and surveillance systems. Orchards registered for export may adjoin unregistered orchards, however specific buffer zones are required for individual diseases.

In China orchards exporting fruit to Australia are in three designated export areas registered by SAIQ. Each exporting area consists of several cooperatively managed orchards which are arranged in contiguous blocks, at a distance from non-exporting pear orchards. There can be other hosts in the vicinity but not within pear export orchards. All export orchards are surveyed by SAIQ for quarantine diseases and a random sample is selected for detailed investigation to provide data to AQIS.

The surveillance and fruit inspection requirements are designed to detect any contamination of export produce with quarantine pests. In China, orchards exporting fruit to Australia are in designated export areas registered by SAIQ. All export orchards and a sample of non export orchards, if they adjoin export orchards, are surveyed by SAIQ for quarantine diseases and a random sample is selected for detailed investigation to provide data to AQIS. SAIQ will ensure that internal quarantine regulations are enacted to restrict the movement of material infected with quarantine diseases into the designated export areas.

Issue 33:

Fruit fly trapping procedures and consistency of monitoring for fruit flies with Australian Codes of Practice: the requirements for fruit fly trapping need to be listed more fully. They are presumably equivalent to Australian requirements, but this should be stated.

AQIS's position:

AQIS has based the required fruit fly trapping procedures for export of ya pear fruit from China on the Australian code of practice for trapping Papaya fruit fly (Interstate Plant Health Regulation Working Group, 1997). This code of practice is being used because of the similarities between Papaya fruit fly and the species of quarantine concern in China. These details are provided in Section 6, Item 3.



9.4 Post-harvest Management

9.4.1 Packing house

Issue 34:

Packing house hygiene: what standards have been proposed by SAIQ for orchard and packing house hygiene?

AQIS's position:

Packing house facilities must be of a high standard of hygiene and will be inspected and approved by an AQIS inspector before pre-clearance.

Issue 35:

Packing requirements and elimination of trash: respondents have asked for an explanation of the statement "packing material must be new and not of plant origin" and information about the elimination of trash from packed fruit.

AQIS's position:

Material of plant origin refers to unprocessed plant material such as straw and not to processed plant material such as cardboard. The intention of this requirement is to remove the possibility of hitch-hiking pests. AQIS will require that only plant material processed by a standard procedure or synthetic material be used as packaging material. There is no provision for repacking. The packages must be free of quarantine pests, plant trash and soil and AQIS will take action if packages contain these contaminants.

Issue 36:

Security of packed fruit against reinfestation: inspected and cleared fruit will be stored separately in cold store at 1-3°C. Are any safeguards planned to prevent pest infestation after packing? How will packages be sealed to prevent further attack?

AQIS's position:

SAIQ will ensure that packing houses meet AQIS's requirements at the time of packing fruit for Australia. All fruit packages for export to Australia would be sealed and removed to a cool store where only fruit for export to Australia are stored. If cartons are ventilated then all ventilation holes will be screened with mesh 1.6mm or less.

9.4.2 Disinfestation treatments

Issue 37:

Disinfestation treatment for pests: why have disinfestation treatments such as fumigation, vapour heat treatment or cold disinfestation not been considered as part of the proposed Chinese requirements?

AQIS's position:

Disinfestation treatments are not recommended for the following reasons. Pear does not tolerate methyl bromide fumigation and deteriorates quickly when warmed through vapour heat treatment. AQIS's proposed management strategy is based on the premise of there being no fruit flies prevalent in pear-



growing areas of China and this is required to be verified by a trapping grid and inspection of fruit. Other pests can be adequately controlled by the proposed management strategies.

Issue 38:

Post-harvest treatment of fruit for pathogens: there is no information provided on post-harvest fruit treatments using fungicides.

AQIS's position:

The likelihood of pathogenic propagules/contaminants reaching fruit will be minimal as fruit is bagged when it is no more than 2.5 cm in diameter. Fruit is thinned three times in China to select a desirable shape and quality, as well as fruit free from pests, and to give a final rate of one fruit per 15 cm. Fruit will be visually inspected during pre-clearance and any fruit that are infected will be rejected. A sample of fruit will also be incubated to check for any latent infection before export of fruit commences. Therefore post-harvest fungicide treatment is considered unnecessary.

9.4.3 Pre-clearance inspection

Issue 39:

Substitution of AQIS responsibilities by SAIQ officers: it is proposed that inspection at blossoming and pre-clearance be conducted by SAIQ officers. If AQIS thinks that it is really necessary to send inspectors to China, it may be required in the first export year only.

AQIS's position:

SAIQ officers are expected to conduct detection surveys and tests for specified diseases. AQIS cannot agree to the proposal on pre-clearance as the principle of pre-clearance is dependent upon inspection by AQIS personnel. Consequently AQIS inspectors will conduct quarantine inspections in China at pre-clearance as long as phytosanitary measures are in place to export ya pear fruit to Australia.

Issue 40:

Microscopic examination of pests at pre-clearance inspection: a number of respondents commented on the need for microscopic examination of all sampled fruit as the minute size of pests such as tetranychid mites will make their detection extremely difficult. The issue of internal feeding pests being overlooked during visual inspection was also raised.

AQIS's position:

Pests which have a high entry risk are targeted in the risk analysis if they are difficult to detect by inspection. All quarantine pests are managed by a systems approach to pest management (sanitation, chemical control, bagging, surveillance etc.).

AQIS does not intend to inspect each fruit under a microscope as it is not feasible to examine a sample of 600 fruit microscopically. However AQIS inspectors will be equipped with a handlens (10x magnification) during pre-clearance inspections, and any suspect fruit will be examined under a stereoscopic microscope. The risk of internal feeding insects will be addressed by random surveillance of culled fruit during the export packing operation and by cutting any fruit which are suspected of being infested by pests.



<u>Issue 41</u>:

Training requirements for pest detection/recognition: the AQIS inspector that will undertake inspection in the exporting country will require specific training in order to recognise all the pests and diseases of concern as they will not have the backup of Australian specialists. It is suggested that the exporting country play a role in providing this training.

AQIS's position:

AQIS provides training to inspectors who are likely to visit China for pre-clearance inspection of ya pear fruit. They will receive training on all aspects of pest and disease identification as well as the survey methodologies and management strategies required in this document. Many of these inspectors have considerable experience in pre-clearance work, especially nashi pear fruit from Japan where the pests affecting pear are similar to those affecting ya pear fruit in China.

AQIS sees merit in incorporating the assistance of SAIQ in training programs but AQIS does not have the financial resources to allow overseas training of its inspectors. However, AQIS will request the retention by AQIS of preserved duplicate specimens intercepted by the inspector and the collection of photographs of pests to be used to assist in training AQIS inspectors.

<u>Issue 42</u>:

Definition of a 'lot': the definition of an inspection 'lot' is inconsistent between the risk analysis documents of China, Korea and Japan and it is unclear how a 'lot' will be defined.

AQIS's position:

Since only registered export orchards are being considered, all fruit harvested and processed from registered orchards on a particular day is an inspection 'lot'. Whilst it is desirable to have one grower as a 'lot' for traceback purposes, the quantities of fruit to be exported are unknown (but likely to be small). It is believed that combining registered growers into one 'lot' will give sufficient fruit to make any statistical sampling scheme valid.

Issue 43:

Inspection sampling rate: several respondents asked what is the agreed sample rate or proportion of fruit for inspection, and suggested that a sample of reject fruit from each day's packing be examined for pests and diseases.

AQIS's position:

The sample rate has not been stated in the draft IRA because the quantity of fruit available for import is unknown. AQIS will set up a sampling plan based on the projected volume of fruit to be exported but the AQIS standard will be used where possible. The AQIS standard is based on Cannon and Roe (1982), where a 600 fruit sample per 'lot' gives a 95% confidence of detecting a 0.5% infection/infestation in a homogeneous lot. However, the sampling rate can be intensified if the AQIS inspector considers that interception of quarantine pests is high.

Culling of fruit on the packing line will be done by packing house staff supervised by SAIQ. A random sample of culled fruit will be inspected by the AQIS pre-clearance officer for internal feeders. If internal feeders are suspected, fruit will be cut for further examination. If surveillance detects critical pests or



symptoms of diseases not specified, samples will be taken and forwarded to SAIQ for laboratory investigation and identification.



<u>Issue 44</u>:

Quality management system: a traceback system will be required for culled fruit so that if pests of concern are found, fruit from the particular registered orchard can be rejected.

AQIS's position:

If a 'lot' is determined to have failed then all fruit in that 'lot' fail. The orchard and packing house registration numbers will be used to traceback to grower lines in order to review pest control programs of offending growers.

<u>Issue 45</u>:

Number and timing of visits by AQIS staff to China: it is proposed that at least three visits are required to Hebei Province each year; at blossom, when fruit are no more than 2.5 cm in diameter and at harvest, to assess the level of pests of concern and the presence of fire blight. The draft IRA suggests that two visits by AQIS personnel will occur only in the first year. It should say 'annually' for as long as the requirements are effective.

AQIS's position:

During the first year of export two visits by AQIS personnel were agreed at the bilateral meeting, one at blossoming by a plant pathologist and one by an AQIS inspector at pre-clearance inspection. An AQIS specialist plant pathologist has already visited China at pre-harvest inspection time. This visit was for the purpose of auditing the efficacy of the phytosanitary measures and assessing orchard sanitation levels. AQIS will also send an Australian plant pathologist in the first year of trade to conduct a survey of designated export areas with an emphasis on fire blight, and to initiate latency tests for diseases of quarantine concern. The expenses for these visits will be borne by AQIS.

An AQIS inspector will visit China for pre-clearance inspection and will continue to do so yearly for the length of the arrangement. The arrangement is to be reviewed at the end of the first year. However, if there are quarantine concerns AQIS may take additional action as deemed necessary.

9.4.4 On-arrival inspection

Issue 46:

On-arrival inspection: what is the purpose and who bears the cost of on-arrival inspections?

AQIS's position:

AQIS has removed the requirement for on-arrival inspection of fruit and replaced this with preclearance inspection. AQIS does however reserve the right to examine relevant certification and seals at the port of arrival in Australia.

Issue 47:

Refinement of import conditions once trade commences: it was submitted that the conditions for the proposed measures will need to be refined before export commences.

AQIS's position:



Ya pear imports will commence when SAIQ and AQIS have agreed on import conditions. In effect, the first shipment will be a trial shipment as import conditions will be reviewed at the end of the first year. Non-compliance provisions are incorporated into the import conditions.

Issue 48:

Ability of China to conform to AQIS requirements: China's general level of expertise together with the efficiency of their recording and monitoring systems must be suitable for the task.

AQIS's position:

AQIS proposes to review the arrangement after the first year of export. This will reveal whether the expertise, recording and monitoring in China is sufficient to meet AQIS requirements. The results of the first season's trade will be critically reviewed by AQIS.

Issue 49:

Importation of fruit via air freight: Is air freight permitted and if so under what conditions?

AQIS's position:

There is no change to the import conditions even if fruit is imported via air freight.

9.4.5 Non-compliance action

Issue 50:

Action to be taken on detection of exotic pests.

AQIS's position:

AQIS's action will depend on the pests and diseases detected. Depending on the arthropod pest found, pesticide applications may be re-evaluated, pre-clearance inspection may be intensified or trade may be suspended.

- If fruit flies are found at pre-clearance inspection area freedom will be suspended and imports will be suspended immediately pending the outcome of an investigation.
- If fire blight is confirmed anywhere in China fruit will not be imported and trade will cease immediately, pending the outcome of an investigation.
- If brown rot is detected in any registered orchard in a designated export area, fruit from that area will not be permitted pending the outcome of an investigation.
- If black spot is detected at an average infection rate of more than 0.5% at blossoming that orchard will be excluded from export of fruit.
- If Japanese pear rust is detected on pear trees, fruit from export orchards within 2km of the infected site will not be accepted into Australia.
- If pear scab or physalospora canker is detected at pre-clearance inspection all fruit from those orchards will be rejected.
- Continued unacceptable levels of quarantine pests at pre-clearance will result in suspension of trade pending the outcome of an investigation.
- Detection of latent infections of black spot, pear scab, physalospora canker on fruit will disqualify those orchards from exporting fruit.



• Detection of latent infections of brown rot or Japanese pear rust on fruit will disqualify the designated export area and areas from within 2km of the infected site respectively from exporting fruit.

Investigations by AQIS in cooperation with SAIQ will determine the ultimate position that AQIS will take.

9.4.6 Post entry quarantine

Issue 51:

Internal restrictions of movement of fruit into Western Australia: both apples and pears from any source are currently prohibited entry to Western Australia under Agriculture WA legislation. AQIS should inform China that there are legitimate restrictions on the movement of fruit within Australia that may have implications for the proposed trade.

AQIS's position:

Movement of fruit from ports of entry to other Australian States is under the control of State Legislation, not AQIS. Fruit will not be permitted into Western Australia as apples and pears from any source are currently prohibited entry under WA State legislation. However, there will be no restrictions imposed by AQIS on other ports of entry.

10. LIST OF RESPONDENTS

Victorian Fruit Exporters Committee Queensland Fruit and Vegetable Growers The Australian Dried Fruits Association Inc. Environment Australia, Biodiversity Group Australian United Fresh Fruit and Vegetable Association Ltd Cherry Growers of Australia Inc. Cherry Growers of South Australia Northern Victorian Fruitgrowers' Association Ltd Primary Industries South Australia Queensland Department of Primary Industries New South Wales Agriculture, Division of Plant Industries Agriculture Western Australia Tasmanian Department of Primary Industry and Fisheries Apple & Pear Growers Association of SA Inc. Crops Division, Department of Primary Industries and Energy Australian Apple and Pear Growers' Association South Australian Research and Development Institute Division of Entomology, Commonwealth Scientific and Industrial Research Organisation Natural Resources and Environment, Victoria China Animal and Plant Quarantine Service, People's Republic of China Northern Territory Department of Primary Industry and Fisheries Division of Horticulture, Commonwealth Scientific and Industrial Research Organisation



Victorian Growers Liaison Committee



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