

BIOSECURITY NEW ZEALAND

STANDARD 155.02.06

Importation of Nursery Stock

Issued as an import health standard pursuant to section 22 of the Biosecurity Act 1993

Biosecurity New Zealand
Ministry of Agriculture and Forestry
PO Box 2526
Wellington
New Zealand

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ENDORSEMENT

This Biosecurity New Zealand standard is hereby approved. Pursuant to section 22 of the Biosecurity Act 1993, I hereby issue this document as an import health standard.

Signature of Manager, Biosecurity Standards Group
Acting pursuant to delegated authority

Date: 1 March 2005

REVIEW

This Biosecurity New Zealand standard is subject to ongoing review. Amendments will be made to the signed original as required. The signed original will be held by the Biosecurity Standards Group, Biosecurity New Zealand, Ministry of Agriculture and Forestry, ASB Bank House, 101-103 The Terrace, Wellington.

AMENDMENT RECORD

Amendments to this standard will be given a consecutive number and will be dated in the body of the table and in the footer. Brief details of the amended pages will be included.

No:	Details:	Date:
1	Section 2.2.1.7 <i>Pesticide treatments for dormant bulbs</i>	27 April 2005
2	<i>Lilium</i> schedule of special conditions, sections 2.2.1.6, 2.2.1.7 and 2.2.2.	17 June 2005
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1. INTRODUCTION

1.1 OFFICIAL CONTACT POINT (NEW ZEALAND NATIONAL PLANT PROTECTION ORGANISATION)

The official contact point in New Zealand for overseas NPPOs is the Ministry of Agriculture and Forestry. All communication pertaining to this import health standard should be addressed to:

Biosecurity New Zealand
Ministry of Agriculture and Forestry
PO Box 2526
Wellington
NEW ZEALAND

Telephone: +64 4 498 9843
E-mail: plantimports@maf.govt.nz

Fax: +64 4 498 9888
Website: <http://www.maf.govt.nz>

1.2 SCOPE

This standard describes the import specifications and entry conditions for nursery stock imported into New Zealand.

1.3 REFERENCES

- Biosecurity Act 1993 (as amended by the Biosecurity Amendment Act 1997)
- Hazardous Substances and New Organisms Act 1996 (HSNO Act 1996)
- International Plant Protection Convention (IPPC)
- Biosecurity New Zealand Standard PBC-NZ-TRA-PQCON: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator
- Biosecurity New Zealand Standard PIT-OS-TRA-ACPQF: Accreditation of Offshore Plant Quarantine Facilities and Operators
- Biosecurity New Zealand Standard 155.04.03: Specification for the Registration of a Plant Pest Diagnostic Laboratory, and Operator

1.4 DEFINITIONS AND ABBREVIATIONS

a.i.: Active ingredient.

Basic: The basic conditions with which all consignments of nursery stock must comply.

Budwood: See Cuttings

Bulb: A thickened, vegetative part of a plant in a dormant state, e.g., true bulbs, bulbils, corms, tubers and rhizomes.

Cuttings: A nursery stock commodity sub-class for budwood and cutting propagation material that are stems only (no roots). Cuttings may be required to be dormant (no leaves).

Environmental Risk Management Authority (ERMA): Authority responsible for administering the Hazardous Substances and New Organisms Act 1996.

Genetically Modified Organism: (as defined by the HSNO Act 1996): Any organism in which any of the genes or any other genetic material:

- a. has been modified by *in-vitro* techniques; or
- b. is inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by *in-vitro* techniques.

Graftstick: See Cuttings

Import health standard: A standard issued under s22 of the New Zealand Biosecurity Act (1993) by the Director-General on the recommendation of a Chief Technical Officer, specifying the requirements to be met for the effective management of risks associated with the importation of risk goods.

Import Permit: Official document authorizing importation of a commodity in accordance with specified phytosanitary requirements (Note: Permits for imports into New Zealand are issued by Biosecurity New Zealand).

Inspector: Inspector under the Biosecurity Act 1993.

International Plant Protection Convention: International Plant Protection Convention, as deposited with FAO in Rome in 1951 and as subsequently amended [FAO, 1990]

IPPC: International Plant Protection Convention

International Standard for Phytosanitary Measures: An international standard adopted by the Conference of FAO, the Interim Commission on Phytosanitary Measures or the Commission on Phytosanitary Measures, established under the IPPC [CEPM, 1996; revised CEPM, 1999]

ISPM: International Standard for Phytosanitary Measures

Level 1, Level 2 or Level 3 Quarantine: A system of post entry quarantine screening whereby nursery stock is grown under certain specified conditions on a property and by a person registered by MAF (see MAF Standard PBC-NZ-TRA-PQCON: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator

MAF: The New Zealand Ministry of Agriculture and Forestry.

Maximum Pest Limit (MPL): The maximum level of infestation/contamination allowed within a consignment.

National Plant Protection Organisation: Official service established by Government to discharge the functions specified by the IPPC. [FAO, 1990; formerly Plant Protection

Organization (National)].

NPPO: National Plant Protection Organisation

Nursery Stock: Whole plants or parts of plants imported for growing purposes, e.g. cuttings, scions, budwood, marcots, off-shoots, root divisions, bulbs, corms, tubers and rhizomes.

Permit to Import: See Import permit

Pest: Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products [FAO, 1990; revised FAO, 1995; IPPC, 1997]

Note: For the purpose of this standard "pest" includes an organism sometimes associated with the pathway, which poses a risk to human or animal or plant life or health (SPS Article 2).

Pest free area: An area in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained [FAO, 1995]

Pest free place of production: Place of production in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained for a defined period [ISPM Pub. No. 10, 1999]

Phytosanitary Certificate: Certificate patterned after the model certificates of the IPPC [FAO, 1990]. The certificate must follow the pattern set out in the model phytosanitary certificate, ISPM Pub. No. 12, 2001, "Guidelines for phytosanitary certificate".

The certificate is issued by the exporting country's NPPO, in accordance with the requirements of the IPPC, to verify that the requirements of the relevant import health standard have been met.

Plants in tissue culture: Plants *in vitro* that have been prepared as tissue culture from one parent by asexual reproduction (clonal techniques) under sterile conditions.

Plants *in vitro*: A commodity class for plants growing in an aseptic medium in a closed container [FAO, 1990; CEPF, 1999; ICPM, 2002 formerly plants in tissue culture].

Post Entry Quarantine (PEQ): The quarantine conditions [Level 3, Level 2, or Level 1 (high or medium security)] under which nursery stock must be grown.

Quarantine Pests (Regulated Organisms): Quarantine pests (regulated organisms) are those pests (organisms) for which phytosanitary actions would be undertaken if they were intercepted/detected. These include new organisms as defined by the Hazardous Substances and New Organisms Act 1996.

Scionwood: See Cuttings

Unit: The basic element selected for sampling. For nursery stock this unit may be a plant, bulb or cutting. For tissue cultures it is the vessel containing the cultures.

Whole Plants: A nursery stock commodity sub-class for rooted cuttings and whole plants.

1.5 GENERAL

Plant species for which entry conditions or import health standards have been developed are listed alphabetically in MAF's Plants Biosecurity Index.

If a species is not listed in the Plants Biosecurity Index, it means that conditions for import into New Zealand have not been developed. For new organisms (species), including genetically modified organisms, as defined in the Hazardous Substances and New Organisms Act 1996, an application has to be made to the Environmental Risk Management Authority (ERMA) at the following address:

Environmental Risk Management Authority
PO Box 131
Wellington
NEW ZEALAND

Phone: +64 4 916 2426

E-mail: info@ermanız.govt.nz

Fax :+64 4 914 0433

Website: <http://www.ermanız.govt.nz>

If a plant species is not included in the Plants Biosecurity Index, but is considered by an importer to be established in New Zealand, the applicant should provide information, including supporting evidence capable of being verified, to ERMA. If ERMA approves an application, MAF will undertake pest risk analyses and develop import health standards in accordance with the requirements of the Biosecurity Act 1993. Pest risk analyses may be undertaken at the importer's expense. For inquiries regarding pest risk analyses, please contact the Biosecurity New Zealand at the address given below.

For plant species requiring additional declarations on the phytosanitary certificate, and for which individual import health standards have not as yet been developed, entry conditions are given in section 3.4 of this standard. Pest risk analyses are required for imports of these species for countries other than those listed.

Biosecurity New Zealand can also be contacted for information on permit application procedures and import health standards. Address for Biosecurity New Zealand:

Border Standards
Biosecurity Standards Group
Biosecurity New Zealand
Ministry of Agriculture and Forestry
P.O. Box 2526
Wellington
NEW ZEALAND

Telephone: +64 4 498 9843

E-mail: plantimports@maf.govt.nz

Fax: +64 4 498 9888

Website: <http://www.maf.govt.nz>

1.6 CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES

The importation of plants and plant products of some plant species is regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), of which New Zealand is a signatory. Regulated plant species, where appropriate, must be accompanied by a valid CITES export permit issued by the appropriate management authority in the country of export. Additional information can be obtained at: <http://www.cites.org>

A CITES import permit, issued by the Department of Conservation, may also be required by New Zealand legislation for specimens of selected species. Importers are advised to contact the Department of Conservation (<http://www.doc.govt.nz>) for further information.

2. IMPORT SPECIFICATION AND ENTRY CONDITIONS

2.1 IMPORT SPECIFICATION

Infestation by visually detectable quarantine pests on inspection at the border must not exceed the Maximum Pest Limit (MPL) which is currently set at 0.5%.

To achieve 95% level of confidence that the MPL will not be exceeded, no infested units are permitted in a randomly drawn sample of 600 units (i.e. acceptance number = 0).

2.2 ENTRY CONDITIONS

The following entry conditions have been developed to ensure that imported nursery stock meets the import specification:

- a) **Basic Conditions** that apply to all nursery stock, as indicated in the Plants Biosecurity Index and outlined in Section 2.2.1 and 2.2.2.
- b) **Special Conditions** that apply to particular types of nursery stock, as indicated in the Plants Biosecurity Index and outlined in the **Schedule of Special Conditions** in Section 3.4.

2.2.1 Basic Conditions

2.2.1.1 Types of Nursery Stock that may be Imported

Nursery stock requiring only basic entry conditions may be imported in any of the following types, as:

- Cuttings (dormant and/or non-dormant)
- Whole Plants
- Dormant Bulbs and Tubers
- Tissue Culture (see section 2.2.2)

2.2.1.2 Import Permit

An import permit is required unless specified otherwise in section 2.2.2 or a schedule of special conditions. To apply for a permit, complete the Form "Application to Import Plant Material" available from the Permit Office or on MAF's website:

<http://www.maf.govt.nz/biosecurity/imports/plants/forms/ai-ns.pdf>

The completed form should be returned to the Permit Office who will ensure that the PEQ requirements can be met before issuing an import permit.

2.2.1.3 Labelling

Each type of plant in the consignment must be clearly identified with its scientific name (genus and species).

2.2.1.4 Cleanliness

Only inert/synthetic material may be used for the protection, packaging and shipping materials of the nursery stock. Consignments contaminated with soil shall be treated, reshipped or destroyed. The interception of other extraneous matter, where it cannot be readily removed, may result in reshipment or destruction of the consignment.

2.2.1.5 Phytosanitary Certificate

Consignments must be accompanied by a phytosanitary certificate certifying that the nursery stock has been inspected in the exporting country in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, and conforms with New Zealand's current import requirements. If visually detectable pests are found which are not listed in the import health standard, the certifying NPPO must establish their regulatory status prior to issuing the certificate. This information is available in MAF's "Biosecurity Organisms Register for Imported Commodities":

<http://www.maf.govt.nz/biosecurity/pests-diseases/registers-lists/boric/>

If a visually detectable pest is not listed in this register, the certifying NPPO must contact MAF (see section 1.1) to establish the regulatory status of the pest.

2.2.1.6. Pesticide treatments for whole plants and cuttings

(a) For whole plants the phytosanitary certificate must have the following additional declaration:

"The plants were raised from seed/cuttings in soil-less rooting media in containers maintained out of contact with the soil".

OR

"The roots of the plants have been dipped in fenamiphos at 1.6g a.i. per litre of water for 30 minutes".

(b) All whole plants and cuttings must be treated for insects and mites as follows unless stated otherwise in the “schedule of special conditions”:

Insects

One of the following three treatments is required:

(1) Methyl bromide (dormant material only): fumigation for 2 hours at atmospheric pressure at one of the following combinations of rate (g/m^3) and temperature ($^{\circ}\text{C}$):

Rate (g/m^3)	Temperature ($^{\circ}\text{C}$)
48	10 – 15
40	16 – 20
32	21 – 27
28	28 – 32

OR

(2) Hot water treatment/chemical treatment (dormant material only): immersion in hot water at a constant temperature of 24°C for at least 2 hours, followed by immersion in hot water at a constant temperature of at least 45°C for at least 3 hours (period required at the stated temperatures excluding warm-up times). Immersion in chlorpyrifos dip (2.4 g active ingredient per litre of dip or as per manufacturer's recommendations) containing a non-ionic surfactant for 2 minutes with agitation. The treatment time must be increased to 5 minutes if bubbles remain present on the bulb surface. The dip solution must be used no more than twice or as per manufacturer's recommendations. The chlorpyrifos dip may be incorporated in the hot water treatment.

OR

(3) Chemical treatment: spray, or preferably immerse in a dip(s) with agitation, according to the following conditions. The plants must be sprayed/dipped using two active ingredients chosen from the table below, one belonging to the organophosphorous chemical group and the other from a different group. For dipping, the treatment time is normally 2 minutes (except fenvalerate) but must be increased to 5 minutes if bubbles remain present on the plant surface. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

Chemical group	Active ingredient	Dip time	Notes
Carbamate	Carbaryl	2-5 mins	
Diacylhydrazine	Tebufenozide	2-5 mins	
Neonicotinoid	Imidacloprid (0.16 g per litre of dip/spray)	2-5 mins	Non-dormant material only
Neonicotinoid	Thiacloprid (0.16 g per litre of dip/spray)	2-5 mins	Non-dormant material only
Organophosphorous	Acephate (0.75 g per litre of dip/spray)	2-5 mins	Non-dormant material only
Organophosphorous	Chlorpyrifos (2.4 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping
Organophosphorous	Dimethoate	2-5 mins	Non-dormant material only
Organophosphorous	Pyrimiphos-methyl (0.475 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping
Pyrethroid	Deltamethrin	15 mins	
Pyrethroid	Fenvalerate	15 mins	
Spinosyns	Spinosad	2-5 mins	Dip/spray at room temperature

Mites

One of the following two treatments is required:

(1) Methyl bromide (dormant material only): fumigation for 2 hours at atmospheric pressure at one of the combinations of rate (g/m^3) and temperature ($^{\circ}\text{C}$) prescribed for insects above.

OR

(2) Chemical treatment: spray, or preferably immerse in a dip(s) with agitation, according to the following conditions. The plants must be sprayed/dipped using either Abamectin or two active ingredients belonging to different chemical groups chosen from the table below. For dipping, the treatment time is normally 2 minutes but must be increased to 5 minutes if bubbles remain present on the plant surface. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

Chemical group	Active ingredient	Dip time	Notes
Avermectin	Abamectin (0.009 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping
Organochlorine	Dicofol	2-5 mins	
Organophosphorous	Acephate (0.75 g per litre of dip/spray)	2-5 mins	Non-dormant material only
Organophosphorous	Chlorpyrifos (2.4 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping
Organophosphorous	Dimethoate	2-5 mins	Non-dormant material only
Organophosphorous	Pirimiphos-methyl (0.475 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

2.2.1.7 Pesticide treatments for dormant bulbs

These treatments are only required for dormant bulbs if specifically stated in the "schedule of special conditions" or section 2.4:

Insects

One of the following three treatments is required:

(1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the following combinations of rate (g/m^3) and temperature ($^{\circ}\text{C}$):

<u>Rate (g/m^3)</u>	<u>Temperature ($^{\circ}\text{C}$)</u>
48	10 – 15
40	16 – 20
32	21 – 27
28	28 – 32

OR

(2) Hot water treatment/chemical treatment: immersion in hot water at a constant temperature of 24°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 3 hours (period required at the stated temperatures excluding warm-up times). Immersion in chlorpyrifos dip (2.4 g active ingredient per litre of dip) containing a non-ionic surfactant for 2 minutes with agitation. The treatment time must be increased to 5 minutes if bubbles remain

present on the bulb surface. The dip solution must be used no more than twice or as per manufacturer's recommendations. The chlorpyrifos dip may be incorporated in the hot water treatment.

OR

(3) Chemical treatment: immersion in a dip(s) containing two active ingredients chosen from the table below, one belonging to the organophosphorous chemical group and the other from a different group, with agitation according to the prescribed conditions. The treatment time is normally 2 minutes but must be increased to 5 minutes if bubbles remain present on the bulb surface. The dip solution must be used no more than twice or as per manufacturer's recommendations.

Chemical group	Active ingredient	Time	Notes
Neonicotinoid	Thiocloprid/Imidacloprid (0.16 g per litre of dip)	2-5 mins	Non-ionic surfactant required
Organophosphorous	Diazinon (0.5 g per litre of dip)	2-5 mins	-
Organophosphorous	Pirimiphos-methyl (2.5-3.25 g per litre of dip)	2-5 mins	Non-ionic surfactant required
Phenylpyrazole	Fipronil (40 mg per litre of dip)	2-5 mins	Non-ionic surfactant required

Mites

One of the following three treatments is required:

(1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the combinations of rate (g/m^3) and temperature ($^{\circ}\text{C}$) prescribed for insects above.

OR

(2) Hot water treatment: immersion in hot water at a constant temperature of 24°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 3 hours (period required at the stated temperatures excluding warm-up times).

OR

(3) Chemical treatment: immersion in a dip(s) with agitation, according to the following conditions. The plants must be sprayed/dipped using either Abamectin or two active ingredients belonging to different chemical groups chosen from the table below. The treatment time is normally 2 minutes but must be increased to 5 minutes if bubbles remain present on the plant surface. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

Chemical group	Active ingredient	Dip time	Notes
Avermectin	Abamectin (0.009 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping
Organochlorine	Dicofol	2-5 mins	
Organophosphorous	Acephate (0.75 g per litre of dip/spray)	2-5 mins	Non-dormant material only
Organophosphorous	Chlorpyrifos (2.4 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping
Organophosphorous	Dimethoate	2-5 mins	Non-dormant material only
Organophosphorous	Pirimiphos-methyl (0.475 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping

Nematodes

Both of the following treatments are required:

(1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the combinations of rate (g/m^3) and temperature ($^{\circ}\text{C}$) prescribed for insects above;

OR Hot water treatment: immersion in hot water at a constant temperature of 24°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 4 hours (period required at the stated temperatures excluding warm-up times).

AND

(2) Chemical treatment: immersion in fenamiphos (1 g active ingredient per litre of dip) for 1 hour.

Fungi

Both of the following treatments are required:

(1) Chemical treatment: immersion in a dip containing one of the following active ingredients, with agitation according to the prescribed conditions. The dip solution must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

Active ingredient	Dip time	Notes
Bromo-chloro-dimethylhydantoin (8.1-16 g per litre of dip)	5 mins	
Formaldehyde (0.4%)	2 hours	Dip at room temperature
Peroxyacetic acid (80 ppm)	5 mins	Dip at room temperature Wetting agent required
Sodium hypochlorite (10%), pH 6.5-7	5 mins	Dip at room temperature

AND

(2) Hot water treatment/chemical treatment: immersion in hot water at a constant temperature of 24°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 3 hours (period required at the stated temperatures excluding warm-up times). Immersion in thiabendazole dip (1-1.3 g active ingredient per litre of dip) containing a wetting agent for 15-30 minutes with agitation. The dip solution must be used no more than twice or as per manufacturer's recommendations. The thiabendazole dip may be incorporated in the hot water treatment;

OR Chemical treatment: immersion in a dip(s) containing two active ingredients belonging to different chemical groups chosen from the table below, with agitation according to the prescribed conditions. The dip solution must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

Chemical group	Active ingredient	Dip time	Notes
Benzimidazole	Thiabendazole (1-1.3 g per litre of dip)	15-30 mins	Dip at room temperature Wetting agent required
Benzimidazole	Thiophanate-methyl (0.75 g per litre of dip)	15-30 mins	Dip at $27-29.5^{\circ}\text{C}$
Dimethyldithio-carbamate	Thiram (11.2 g per litre of dip)	-	Dip at room temperature
Imidazole	Prochloraz (0.25 g per litre of dip)	15 mins	Dip at room temperature
Strobilurin	Azoxystrobin (0.95 g per litre of dip)	15 mins	Dip at room temperature

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

2.2.1.8 Measures for *Helicobasidium mompa*

A. For nursery stock from the following countries:

Afghanistan	Iraq	Nepal	Sri Lanka
Armenia	Israel	Oman	Syria
Bangladesh	Jordan	Pakistan	Turkey
Bhutan	Kuwait	Philippines	United Arab Emirates
Brunei	Laos	Saudi Arabia	Vietnam
Cambodia	Lebanon	Singapore	Yemen
Iran	Myanmar		

For whole plants, cuttings and dormant bulbs:

- (i) the phytosanitary certificate must have the following additional declaration:
"The nursery stock has been sourced from a “Pest free area”, free from *Helicobasidium mompa*".

B. For nursery stock from the following countries:

Azerbaijan	Kazakstan	Russia	Turkmenistan
China	Kyrgyzstan	South Africa	Uganda
Georgia	Malawi	South Korea	Uzbekistan
India	Malaysia	Taiwan	
Indonesia	Mongolia	Tajkistan	
Japan	North Korea	Thailand	

a) For dormant bulbs:

- (i) the phytosanitary certificate must have the following additional declaration:
"The dormant bulbs have been sourced from a “Pest free area” or “Pest free place of production”, free from *Helicobasidium mompa*"

b) For whole plants and cuttings:

- (i) the phytosanitary certificate must have the following additional declaration:
"The nursery stock has been sourced from a “Pest free area” or “Pest free place of production”, free from *Helicobasidium mompa*"

AND

- (ii) the consignment must be treated for the fungus as follows, unless the nursery stock requires Level 3 PEQ as stated in the “schedule of special conditions”.

Both of the following treatments are required:

(1) Chemical treatment: spray, or preferably immerse in a dip(s) with agitation, using one of the following active ingredients according to the following conditions. For dipping, the treatment time is 5 minutes. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

Active ingredient	Dip time	Notes
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Bromo-chloro-dimethylhydantoin (8.1-16 mg per litre of dip/spray)	5 mins	
Peroxyacetic acid (80 ppm)	5 mins	Dip at room temperature Wetting agent required
Sodium hypochlorite (10%), pH 6.5-7	5 mins	Dip at room temperature

AND

(2) Hot water treatment/chemical treatment (dormant material only): immersion in hot water at a constant temperature of 24°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 3 hours (period required at the stated temperatures excluding warm-up times). Immersion in thiabendazole dip (1-1.3 g active ingredient per litre of dip) containing a wetting agent for 15-30 minutes with agitation. The dip solution must be used no more than twice or as per manufacturer's recommendations. The thiabendazole dip may be incorporated in the hot water treatment;

OR Chemical treatment: spray, or preferably immerse in a dip(s) with agitation, according to the following conditions. The plants must be sprayed/dipped using two active ingredients belonging to different chemical groups chosen from the table below. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

Chemical group	Active ingredient	Dip time	Notes
Anilinopyrimidine	Pyrimethanil	15 mins	Dip at room temperature
Benzimidole	Carbendazim (1 g per litre of dip/spray)	20 mins	
Benzimidole	Thiophanate-methyl	10-15 mins	
Chloronitrile	Chlorothalonil	15 mins	Dip at room temperature
Dicarboximide	Iprodione (2 g per litre of dip/spray)	30 mins	
Dimethyldithio-carbamate	Thiram (11.2 g per litre of dip)	-	Dip at room temperature
Phenylurea	Pencycuron	15 mins	
Phosphonate	Fosetyl-aluminium	15 mins	Dip at room temperature
Strobilurin	Azoxystrobin (0.95 g per litre of dip)	15 mins	Dip at room temperature
Triazole	Propiconazole (0.5 g per litre of dip)	5 mins	

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

2.2.1.9 Measures for *Phymatotrichopsis omnivora*

For whole plants (not cuttings, dormant bulbs or tissue culture) from Brazil, Mexico, the United States of America or Venezuela, the phytosanitary certificate must have the following additional declaration:

"The nursery stock has been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

2.2.1.10 Post-Entry Quarantine (PEQ)

Following arrival in New Zealand all nursery stock, unless specified in section 2.2.2 or the schedules of special entry conditions, must undergo a period of post entry quarantine in order to check for the presence of regulated pests and/or diseases. Post-entry quarantine will be carried out in a transitional facility registered in accordance with Biosecurity New Zealand Standard PBC-NZ-TRA-PQCON: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator.

The quarantine period will be a minimum of 3 months, unless otherwise stated in the schedule of special entry conditions. The nursery stock must be actively growing throughout this period. The quarantine period may be extended if material is slow growing, pests and diseases are detected or treatments required. The MAF Inspector has full authority to determine when the plant material may receive biosecurity clearance.

2.2.2 ENTRY CONDITIONS FOR TISSUE CULTURE

2.2.2.1 Labelling

Cultures must be clearly identified with their scientific name (genus and species).

2.2.2.2 Cleanliness & Tissue Culture Media

Cultures imported in growing media must have been grown in the vessel in which they are imported. The container must be pest-proof, rigid, and either clear plastic or glass. The tissue culture media must not contain fungicides or antibiotics. Plants in tissue culture must be produced in a facility under conditions that prevent contamination with regulated pests.

2.2.2.3 Phytosanitary Certificate

Cultures must be accompanied by a phytosanitary certificate, certifying that the nursery stock has been inspected in the exporting country according to appropriate procedures and conforms with New Zealand's current entry conditions.

For **plantlets recently removed from *in-vitro* tissue culture**, the phytosanitary certificate must be endorsed that:

"These plantlets were removed from the original culture container(s) in which they were grown, not more than 48 hours before export, and have not been in contact with any other growing media".

2.2.2.4 Import permit

An import permit is not required for tissue culture unless the schedule of special conditions specifies that these cultures require post entry quarantine.

2.2.2.5 Inspection on arrival

Visual inspection of the tissue culture upon arrival in New Zealand will determine if the tissue culture shows any signs of contamination (e.g. cloudy agar, fungal spores or bacterial growth). If contamination is observed the importer will be given the option of reshipment or destruction of the consignment.

2.2.3 IMPORTATION OF POLLEN

A prior import permit must be obtained from the Permit Officer.

2.2.4 IMPORTATION OF NEW ORGANISMS

Proposals for the deliberate introduction of new organisms as defined by the Hazardous Substances and New Organisms Act 1996 should be referred to the Environmental Risk Management Authority (see section 1.5).

2.3 COMPLIANCE PROCEDURES

On arrival in New Zealand all documentation associated with the importation will be inspected by an inspector to ensure compliance. The nursery stock will be inspected using a randomly selected minimum 600 unit sample, to ensure that it complies with the entry conditions.

If organisms are detected that cannot be identified, they will be treated as regulated organisms. If the number of units infested with quarantine pests exceeds the acceptance number, the nursery stock will be treated, reshipped or destroyed as directed by the inspector, at the expense of the importer.

2.3.1 VALIDATION OF OVERSEAS MEASURES

For all imported nursery stock, MAF reserves the right to validate all measures that are undertaken overseas. This includes measures undertaken by national plant protection organisations, MAF-accredited facilities offshore and within New Zealand. Audits will be conducted on a regular basis and at the expense of the importer.

2.3.2 TREATMENT AND TESTING OF THE CONSIGNMENT

All pesticide treatments must be carried out in accordance with manufacturer's recommendations, including labeling of the treated plant commodity with the name of the active ingredient used and any handling requirements.

Upon arrival and following inspection at the border, if any required treatment(s) or testing of the consignment has not been completed within the prescribed period, these measures may be completed in New Zealand where such services are available, and by prior arrangement with MAF. All testing and treatment in New Zealand must be

completed in MAF-accredited facilities, accredited to MAF standards 155.04.03: Specification for the Registration of a Plant Pest Diagnostic Laboratory, and Operator and BMG-STD-TREAT: Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export, respectively.

2.4 NEW ZEALAND NURSERY STOCK RETURNING FROM OVERSEAS

All returning product of New Zealand origin will be regarded as offshore nursery stock and must meet the requirements of the import health standard or be reshipped or destroyed, except under the following circumstances:

(i) Nursery stock “unopened” offshore

Product in its original pest-proof container with the original seals intact is permitted entry subject to a product reconciliation check on arrival to verify that it is New Zealand produce.

(ii) Nursery stock “opened” offshore

Nursery stock inspected offshore, and rejected for any reason, is permitted entry subject to the following:

- (a) verification that the nursery stock was either returned to its original pest-proof container and resealed immediately after inspection or stored in pest-proof facilities prior to re-export; and
- (b) the consignment was reshipped back to New Zealand by the first available means; and
- (c) inspection, clearance and reconciliation of the consignment on arrival in New Zealand as per section 2 of this standard; and
- (d) treatment with a generic insecticide and miticide as per sections 2.2.1.6 (whole plants and cuttings) or 2.2.1.7 (dormant bulbs) of this standard.

3. SCHEDULE OF SPECIAL ENTRY CONDITIONS

3.1 SPECIAL ENTRY CONDITIONS

Plant genera listed in these schedules have entry requirements that differ in some way from the **Basic Conditions** (Section 2.2.1.). Differences may involve:

- special isolation requirements
- special treatment requirements
- minimum quarantine period
- a requirement for Level 3 Quarantine
- special phytosanitary certificate additional declarations

All consignments must meet the **Basic Conditions** in Section 2.2.1 and 2.2.2 unless a variation to these conditions is specified in the schedule.

3.2 ACCREDITATION OF OFFSHORE PLANT QUARANTINE FACILITIES

Nursery stock normally subject to post-entry quarantine may be imported from MAF-accredited (registered) facilities overseas under predetermined conditions, with a reduced PEQ requirement following arrival in New Zealand. Overseas facilities must be accredited by MAF according to MAF Standard PIT-OS-TRA-ACPQF: Accreditation of Offshore Plant Quarantine Facilities and Operators. A list of such MAF-accredited facilities is available on MAF's website:

<http://www.maf.govt.nz/biosecurity/imports/plants/offshore-accredited-facilities.htm>

3.3 AMENDMENTS TO THE PLANTS BIOSECURITY INDEX

The Plants Biosecurity Index will be further updated with plant species assessed by ERMA as being either “not new organisms” or approved for entry into New Zealand.

The Plants Biosecurity Index will be continuously updated on MAF's website:

<http://www1.maf.govt.nz/cgi-bin/bioindex/bioindex.pl>

The information provided within the web site copy of the Plants Biosecurity Index is only intended to be general information to the public. It is not intended to take the place of, or to represent, the written law of New Zealand or other official guidelines or requirements. Web site users are advised to contact Biosecurity New Zealand to confirm import status.

Abies

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Abies*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Bursaphelenchus* spp.; *Lophodermium* spp.; *Phytophthora ramorum*, Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3

Minimum Period: 6 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Acacia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Acacia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Xylella fastidiosa*

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from All Countries except Argentina, Belize, the Caribbean Islands, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States of America, Venezuela and Yugoslavia:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Plants in Tissue Culture from All Countries:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Acca sellowiana

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Acca sellowiana*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Luxembourg, Norway, The Netherlands, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Puccinia psidii*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration:

"*Puccinia psidii* is not known to occur in _____ (the country or state of origin) _____".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Acer*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Cryphonectria parasitica*; *Phytophthora ramorum*; *Xylella fastidiosa*

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings (dormant) and Whole Plants (dormant) from:

a) Australia, Canada, Israel and South Africa:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration(s):

1. "*Cryphonectria parasitica* is not known to occur in _____ (the country or state where the plants/cuttings were produced) _____".

2. "The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum* and *Xylella fastidiosa*".

OR

PEQ: Level 3

Minimum Period: 6 months

b) All Countries except Argentina, Australia, Belize, Canada, the Caribbean Islands, Costa Rica, El Salvador, Guatemala, Honduras, Israel, Mexico, Nicaragua, Panama, Peru, South Africa, United States of America, Venezuela and Yugoslavia:

PEQ: Level 3

Minimum Period: 6 months

C. For Tissue Cultures from All Countries:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Acrocomia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Acrocomia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Hawaii, mainland USA

Quarantine Pests: Lethal yellowing; cadang-cadang

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

PEQ: Level 2

Minimum Period: 3 months

Height Limit: Plants must not exceed 1.5m in height

Additional Declaration:

"Cadang cadang and lethal yellowing are not known to occur in _____ (the country or state where the plants were grown) _____".

Actinidia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Actinidia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Actinidia* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

2. Pests of *Actinidia*

Refer to the pest list.

3. Entry conditions for:

3.1 *Actinidia* cuttings and tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Actinidia* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Actinidia* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only]. No additional declarations are required.

(iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(v) Post-entry quarantine

PEQ: All *Actinidia* nursery stock must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator.*

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 6 months in post-entry quarantine and will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Actinidia*”, at the expense of the importer. Six months is an

indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Actinidia*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Curculionidae

Otiorhynchus salicicola

weevil

Hemiptera

Miridae

Adelphocoris lineolatus

alfalfa plant bug

Homoptera

Cicadellidae

Empoasca vitis

grape leafhopper

Coccidae

Ceroplastes rusci

fig wax scale

Diaspididae

Pseudaulacaspis pentagona

white peach scale

Lepidoptera

Tortricidae

Lobesia botrana

grape berry moth

Proeulia auraria

grapevine leafroller

Proeulia chrysopteris

grapevine leaf-rolling tortricid

Thysanoptera

Thripidae

Scirtothrips dorsalis

chilli thrips

Mite

Arachnida

Acarina

Tenuipalpidae

Brevipalpus chilensis

false spider mite

Fungus

Ascomycota

Hypocreales

Hypocreaceae

Calonectria ilicicola (anamorph *Cylindrocladium parasiticum*)

root and stem rot

mitosporic fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Phyllosticta actinidiae

Brown leaf spot

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)

armillaria root rot

Bacterium

Pseudomonadaceae

Pseudomonas syringae pv. *actinidiae*

bacterial canker

Virus

Apple stem grooving virus [*Actinidia* infecting strain]

-

Disease of unknown aetiology

Chlorotic disease of kiwifruit

-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Curculionidae

Asynonychus cervinus

Fuller's rose weevil

Scarabaeidae

Costelytra zealandica

grass grub

Scolytidae

Hylastes ater

black pine bark beetle

Hemiptera

Miridae

Calocoris norvegicus

potato mirid

Homoptera

Aleyrodidae

Trialeurodes vaporariorum

greenhouse whitefly

Coccidae

Ceroplastes sinensis

Chinese wax scale

Coccus hesperidum

brown soft scale

Saissetia oleae

black scale

Diaspididae

Aonidiella aurantii

California red scale

Aspidiotus nerii

oleander scale

Diaspidiotus perniciosus

San Jose scale

Eupulvinaria hydrangeae

cottony hydrangea scale

Hemiberlesia lataniae

latania scale

Hemiberlesia rapax

greedy scale

Ricaniidae

Scolypopa australis

passionvine hopper

Lepidoptera

Oecophoridae

Stathmopoda skelloni

bud moth

Tortricidae

Cnephasia jactatana

black lyre leafroller

Ctenopseustis obliquana

brownheaded leafroller

Epiphyas postvittana

light brown apple moth

Planotortrix excessana

greenheaded leafroller

Planotortrix notophaea

blacklegged leafroller

Thysanoptera

Thripidae

Heliethrips haemorrhoidalis

greenhouse thrips

Thrips imaginis

plague thrips

Thrips obscuratus

New Zealand flower thrips

Mite

Arachnida

Acarina

Tenuipalpidae

Brevipalpus obovatus

privet mite

Tetranychidae

Eotetranychus sexmaculatus

sixspotted mite

Tetranychus urticae

twospotted spider mite

Tydeidae

Orthotydeus caudatus

-

Fungus

Ascomycota

Diaporthales

Valsaceae

Diaporthe actinidiae

phomopsis canker

Diaporthe pernicioso (anamorph *Phomopsis mali*)

canker

Diatrypales

Diatrypaceae

Eutypa lata

eutypa dieback

Dothideales

Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)

canker

Botryosphaeria parva (anamorph *Fusicoccum parvum*)

canker

Botryosphaeria stevensii (anamorph *Diplodia mutila*)

botryosphaeria canker

Hypocreales

Hypocreaceae

Calonectria kyotensis (anamorph *Cylindrocladium scoparium*)

root and stem rot

Gibberella acuminata (anamorph *Fusarium acuminatum*)

fusarium storage rot

Nectria haematococca (anamorph *Fusarium solani*)

fusarium fruit rot

Nectria radicola var. *macroconidialis*

cylindrocarpon rot

Leotiales

Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)

grey mould

Monilinia fructicola

American brown rot

Sclerotinia sclerotiorum

cottony rot

Phyllachorales

Phyllachoraceae

Glomerella cingulata (anamorph *Colletotrichum*

anthracnose

gloeosporioides)

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria novae-zealandiae

armillaria

Ceratobasidiales

Ceratobasidiaceae

Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)

rhizoctonia rot

Poriales

Coriolaceae

Pycnoporus coccineus

branch canker

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*)

Rolf's disease

Oomycota

Pythiales

Pythiaceae

Phytophthora cactorum

phytophthora crown and root rot

Phytophthora cinnamomi

phytophthora crown and root rot

Phytophthora citricola

brown rot of fruit

Phytophthora cryptogea

pink rot

Phytophthora lateralis

brown rot

Phytophthora megasperma

pink rot

Phytophthora nicotianae var. *nicotianae*

root and stem rot

mitosporic fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Fusicoccum luteum

bunch rot

Macrophomina phaseolina

ashy stem blight

Phoma exigua

phoma rot

Phoma glomerata

phoma fruit and leaf spot

Phoma huancayensis

phoma rot

<i>Phoma macrostoma</i>	fruit and leaf spot
<i>Phoma nigricans</i>	leaf spot
<i>Phoma plurivora</i>	bunch rot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum acutatum</i>	anthracnose
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Cladosporium oxysporum</i>	cladosporium leaf spot
<i>Pseudocercospora handelii</i>	cercospora leaf spot
<i>Thielaviopsis basicola</i>	black root rot
Moniliaceae	
<i>Acremonium alternatum</i>	-
<i>Verticillium albo-atrum</i>	verticillium wilt
unknown Hyphomycetes	
unknown Hyphomycetes	
<i>Aureobasidium pullulans</i>	seed rot
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas marginalis</i>	soft rot
<i>Pseudomonas viridiflava</i>	leaf blight
Rhizobiaceae	
<i>Agrobacterium tumefaciens</i>	crown gall

Inspection, Testing and Treatment Requirements for *Actinidia*

ORGANISM TYPES	NZ MAF ACCEPTABLE METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only]
Mite	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] or binocular microscope inspection in PEQ [plants in tissue culture only]
Fungi	
<i>Calonectria ilicicola</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Phyllosticta actinidiae</i>	Growing season inspection in PEQ for disease symptom expression.
Bacterium	
<i>Pseudomonas syringae</i> <i>pv. actinidiae</i>	PCR using the OCTF/OCTR primers (Sawada <i>et al.</i> , 1997) or PAV 1/P 22 primers (Scortichini <i>et al.</i> , 2002)
Virus	
<i>Apple stem grooving virus</i> [<i>Actinidia</i> infecting strain]	ELISA or PCR (Clover <i>et al.</i> , 2003), AND herbaceous indicators Cq, Nb, Ng, No and Pv AND TEM.
Disease of unknown aetiology	
Chlorotic disease of kiwifruit	Growing season inspection in PEQ for disease symptom expression.

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. Transmission electron microscopy (TEM) – each plant must be observed under the TEM for virus particles.
3. Indicator hosts: *Chenopodium quinoa* (Cq), and *Nicotiana benthamiana* (Nb), *N. occidentalis* cv. 37B (No), *N. glutinosa* (Ng) and *Phaseolus vulgaris* cv. Prince (Pv). At least two plants of each indicator species must be used in mechanical inoculation tests.
4. Indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
5. Enzyme linked immunosorbent assay (ELISA); Polymerase chain reaction (PCR).
6. Testing must be carried out on *Actinidia* plants while they are in active growth. For bioassay and ELISA, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.
7. PCR and ELISA must be validated using positive controls/reference material prior to use in quarantine testing.
8. Positive and negative controls must be used in ELISA tests.

9. Positive and negative controls (including a blank water control) must be used in PCR. Ideally positive internal controls and a negative plant control should be used. Internal controls in PCR tests are important to avoid the risk of false negatives.
10. Inspect *Actinidia* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
11. With prior notification, MAF will accept other internationally recognised testing methods.

References

- Clover, G.R.G., Pearson, M.N., Elliott, D.R., Tang, Z., Smales, T.E. and Alexander, B.J.R. (2003). Characterization of a strain of *Apple stem grooving virus* in *Actinidia chinensis* from China. *Plant Pathology* **52**: 371-378.
- Sawada, H., Takeuchi, T. and Matsuda, I. (1997). Comparative analysis of *Pseudomonas syringae* pv. *actinidiae* and pv. *phaseolicola* based on phaseolotoxin-resistant ornithine carbamoyltransferase gene and 16S- 23S rRNA Intergenic spacer sequences. *Applied and Environmental Microbiology* **63**: 282-288.
- Scortichini, M., Marchesi, U. and Prospero, P. (2002). Genetic relatedness among *Pseudomonas avellanae*, *P. syringae* pv. *theae* and *P. s.* pv. *actinidiae*, and their identification. *European Journal of Plant Pathology* **108**: 269-278.

Aesculus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Aesculus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Phytophthora ramorum*; *Xylella fastidiosa*

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from Australia, Canada, Israel and South Africa
(these commodities may only be imported from these countries):

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum* and *Xylella fastidiosa*".

B. For Plants in Tissue Culture from All Countries:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Allium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Allium* nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

2. Pests of *Allium*

Refer to the pest list.

3. Entry conditions for:

3.1 *Allium* dormant bulbs from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Allium* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria, phytoplasmas and viruses.

AND

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Allium* dormant bulbs in this consignment have been:

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria, phytoplasmas and viruses."

(iv) Post-entry quarantine

PEQ: Level 2

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Allium* plants in tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Allium* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of Aster yellows phytoplasma, *Impatiens necrotic spot virus*, *Iris yellow spot virus*, *Tobacco rattle virus* and *Tomato black ring virus*.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Allium* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

AND

- tested using molecular/ serological methods [choose ONE option] and found free of Aster yellows phytoplasma, *Impatiens necrotic spot virus*, *Iris yellow spot virus*, *Tobacco rattle virus* and *Tomato black ring virus*."

(iv) *Post-entry quarantine*

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Allium*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Curculionidae

Brachycerus muricatus

weevil

Brachycerus undatus

weevil

Ceutorhynchus jakovlevi

onion weevil

Nitidulidae

Carpophilus obsoletus

dried fruit beetle

Diptera

Anthomyiidae

Delia antiqua

onion maggot

Delia florilega

onion fly

Heleomyzidae

Suillia lurida

garlic fly

Suillia univittata

-

Syrphidae

Eumerus amoenus

onion bulb fly

Lepidoptera

Cossidae

Dyspessa ulula

garlic moth

Yponomeutidae

Acrolepia alliella

-

Acrolepia sapporensis

allium leafminer

Acrolepiopsis assectella

leek moth

Thysanoptera

Thripidae

Thrips tabaci [vector]

onion thrips

Mite

Arachnida

Acarina

Acaridae

Rhizoglyphus setosus

bulb mite

Eriophyidae

Aceria tulipae [vector]

wheat curl mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Paralongidorus maximus

-

Trichodoridae

Paratrichodorus allius

stubby root nematode

Paratrichodorus minor [vector]

stubby root nematode

Paratrichodorus teres

stubby root nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides besseyi

rice white-tip nematode

Aphelenchoides parietinus

-

Belonolaimidae

Belonolaimus gracilis

sting nematode

Hoplolaimidae	
<i>Helicotylenchus indicus</i>	spiral nematode
<i>Helicotylenchus microlobus</i>	spiral nematode
<i>Helicotylenchus multicinctus</i>	spiral nematode
<i>Hoplolaimus seinhorsti</i>	lance nematode
<i>Rotylenchulus reniformis</i>	reniform nematode
Meloidogynidae	
<i>Meloidogyne arenaria</i>	peanut root knot nematode
<i>Meloidogyne chitwoodi</i>	root knot nematode
Tylenchidae	
<i>Ditylenchus dipsaci</i> [strains not in New Zealand]	stem and bulb nematode

Fungus

Ascomycota

Dothideales

Mycosphaerellaceae

Mycosphaerella allii-cepae (anamorph *Cladosporium allii-cepae*) leaf blotch

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria mellea (anamorph *Rhizomorpha subcorticalis*) armillaria root rot

Basidiomycota: Teliomycetes

Uredinales

Melampsoraceae

Melampsora allii-fragilis rust

Pucciniaceae

Puccinia asparagi asparagus rust

Basidiomycota: Ustomycetes

Ustilaginales

Tilletiaceae

Urocystis colchici leaf smut

Oomycota

Pythiales

Pythiaceae

Phytophthora palmivora black rot

mitosporic fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Phyllosticta allii leaf blight

Septoria viridi-tingens --

Bacterium

Enterobacteriaceae

Erwinia chrysanthemi pv. *chrysanthemi* bacterial soft rot

Erwinia rhapontici bacterial soft rot

Pseudomonadaceae

Burkholderia cepacia sour skin

Pseudomonas xanthochlora -

Virus

Garlic dwarf virus -

Garlic mite-borne filamentous virus -

Garlic mite-borne latent virus -

Garlic virus A -

Garlic virus X -

Impatiens necrotic spot virus -

Iris yellow spot virus -

Onion mite-borne latent virus -

Shallot mite-borne latent virus -

Shallot virus X -
Shallot yellow stripe virus -
Sint-Jan's onion latent virus -
Tobacco rattle virus [strains not in New Zealand] -
Tomato black ring virus -

Phytoplasma

Aster yellows phytoplasma -
Garlic decline phytoplasma -
Onion yellows phytoplasma -

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Curculionidae

Listroderes difficilis

vegetable weevil

Elateridae

Agrypnus variabilis

variable wireworm

Nitidulidae

Carpophilus hemipterus

dried fruit beetle

Dermaptera

Labiduridae

Euborellia annulipes

groundnut earwig

Diptera

Anthomyiidae

Delia platura

seedcorn maggot

Syrphidae

Eumerus strigatus

onion bulb fly

Eumerus tuberculatus

lesser bulb fly

Merodon equestris

narcissus bulb fly

Homoptera

Aphididae

Neotoxoptera formosana

onion aphid

Lepidoptera

Noctuidae

Agrotis ipsilon

greasy cutworm

Agrotis ipsilon aneituma

greasy cutworm

Pyralidae

Ephestia cautella

tropical warehouse moth

Thysanoptera

Thripidae

Thrips tabaci

onion thrips

Mite

Arachnida

Acarina

Acaridae

Rhizoglyphus echinopus

bulb mite

Rhizoglyphus robini

bulb mite

Tyrophagus putrescentiae

mould mite

Eriophyidae

Aceria tulipae

wheat curl mite

Tetranychidae

Petrobia latens

brown wheat mite

Nematode

Adenophorea

Dorylaimida

Trichodoridae

Paratrichodorus minor

stubby root nematode

Secernentea

Tylenchida

Aphelenchidae

Aphelenchus avenae

-

Aphelenchoididae

Aphelenchoides ritzemabosi

foliar nematode

Hoplolaimidae

<i>Helicotylenchus dihystera</i>	spiral nematode
<i>Helicotylenchus labiatus</i>	nematode
Meloidogynidae	
<i>Meloidogyne hapla</i>	northern root knot nematode
<i>Meloidogyne incognita</i>	southern root knot nematode
<i>Meloidogyne javanica</i>	Javanese root knot nematode
Pratylenchidae	
<i>Pratylenchus crenatus</i>	root lesion nematode
<i>Pratylenchus penetrans</i>	root lesion nematode
Tylenchidae	
<i>Ditylenchus destructor</i>	potato rot nematode
<i>Ditylenchus dipsaci</i>	stem and bulb nematode

Fungus

Ascomycota

Dothideales

Botryosphaeriaceae

Botryosphaeria rhodina (anamorph *Lasiodiplodia theobromae*) gummosis

Pleosporaceae

Pleospora allii (anamorph *Stemphylium vesicarium*) black mould

Pleospora herbarum (anamorph *Stemphylium herbarum*) black mould rot

Pleospora infectoria black mould

Pleospora tarda (anamorph *Stemphylium botryosum*) black mould

Hypocreales

Hypocreaceae

Gibberella acuminata (anamorph *Fusarium acuminatum*) fusarium storage rot

Gibberella avenacea (anamorph *Fusarium avenaceum*) fusarium stem canker

Gibberella fujikuroi (anamorph *Fusarium fujikuroi*) fusarium rot

Gibberella subglutinans (anamorph *Fusarium subglutinans*) fusarium rot

Nectria haematococca (anamorph *Fusarium solani*) fusarium fruit rot

Leotiales

Sclerotiniaceae

Botryotinia allii neck rot

Botryotinia fuckeliana (anamorph *Botrytis cinerea*) grey mould

Botryotinia squamosa (anamorph *Botrytis squamosa*) botrytis leaf blight

Sclerotinia sclerotiorum cottony rot

Phyllachorales

Phyllachoraceae

Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*) anthracnose

Saccharomycetales

Dipodascaceae

Dipodascus geotrichum (anamorph *Geotrichum candidum*) sour rot

Saccharomycetaceae

Kluyveromyces marxianus yeast soft rot

Basidiomycota: Basidiomycetes

Ceratobasidiales

Ceratobasidiaceae

Thanatephorus cucumeris (anamorph *Rhizoctonia solani*) rhizoctonia rot

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*) Rolf's disease

Basidiomycota: Teliomycetes

Uredinales

Pucciniaceae

Puccinia allii rust

Basidiomycota: Ustomycetes

Platyglloeales

Platyglloeaceae

Helicobasidium purpureum (anamorph *Rhizoctonia crocorum*) violet root rot

Ustilaginales	
Tilletiaceae	
<i>Urocystis magica</i>	onion smut
Oomycota	
Peronosporales	
Peronosporaceae	
<i>Peronospora destructor</i>	onion downy mildew
Pythiales	
Pythiaceae	
<i>Phytophthora cactorum</i>	phytophthora crown and root rot
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
<i>Phytophthora cryptogea</i>	pink rot
<i>Phytophthora drechsleri</i>	-
<i>Phytophthora erythroseptica</i>	pink rot
<i>Phytophthora nicotianae</i>	buckeye rot
<i>Phytophthora porri</i>	white leaf spot
<i>Pythium afertile</i>	pythium root rot
<i>Pythium coloratum</i>	pythium root rot
<i>Pythium intermedium</i>	root rot
<i>Pythium irregulare</i>	pythium root and stem rot
<i>Pythium paroecandrum</i>	pythium root and stem rot
<i>Pythium rostratum</i>	root rot
<i>Pythium spinosum</i>	pythium root rot
<i>Pythium ultimum</i>	leak
<i>Pythium vexans</i> (anamorph <i>Stemphylium botryosum</i>)	pythium root rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus microsporus</i>	mushy rot
<i>Rhizopus oryzae</i>	wet rot
<i>Rhizopus stolonifer</i>	rhizopus soft rot
mitosporic fungi (Agonomycetes)	
Agonomycetales	
unknown Agonomycetales	
<i>Sclerotium cepivorum</i>	white rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophomina phaseolina</i>	ashy stem blight
<i>Phoma destructiva</i>	bulb rot
<i>Phoma exigua</i>	phoma rot
<i>Pyrenochaeta terrestris</i>	pink root rot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum circinans</i>	smudge
<i>Colletotrichum dematium</i>	anthracnose
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Alternaria porri</i>	alternaria blight
<i>Alternaria tenuissima</i>	alternaria mould
<i>Cercospora duddiae</i>	leaf spot
<i>Cladosporium allii</i>	leaf blotch
<i>Cochliobolus geniculatus</i>	leaf spot
<i>Embellisia allii</i>	bulb canker
<i>Stemphylium lycopersici</i>	stemphylium fruit spot
<i>Thielaviopsis basicola</i>	black root rot
Moniliaceae	
<i>Botrytis tulipae</i>	blast

<i>Cylindrocladiella parva</i>	root rot
Tuberculariales	
Tuberculariaceae	
<i>Fusarium culmorum</i>	dry rot
<i>Fusarium oxysporum</i>	leaf spot
<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	fusarium rot
<i>Fusarium poae</i>	fusarium rot
Bacterium	
Enterobacteriaceae	
<i>Erwinia carotovora</i> subsp. <i>atroseptica</i>	bacterial soft rot
<i>Erwinia carotovora</i> subsp. <i>carotovora</i>	bacterial soft rot
<i>Erwinia herbicola</i>	purple stain
<i>Pectobacterium carotovorum</i>	bacterial soft rot
Pseudomonadaceae	
<i>Burkholderia gladioli</i> pv. <i>allicola</i>	bacterial soft rot
<i>Pseudomonas aeruginosa</i>	-
<i>Pseudomonas cichorii</i>	bacterial leaf spot
<i>Pseudomonas fluorescens</i>	pink eye
<i>Pseudomonas marginalis</i>	bacterial spot
<i>Pseudomonas marginalis</i> pv. <i>marginalis</i>	leaf spot
<i>Pseudomonas syringae</i>	bacterial blast
<i>Pseudomonas syringae</i> pv. <i>porri</i>	-
<i>Pseudomonas syringae</i> pv. <i>syringae</i>	bacterial soft rot
<i>Pseudomonas viridiflava</i>	leaf blight
<i>Ralstonia solanacearum</i> (Race 1)	bacterial wilt
Virus	
<i>Cucumber mosaic virus</i>	-
<i>Garlic common latent virus</i>	-
<i>Garlic mosaic virus</i>	-
<i>Garlic virus B</i>	-
<i>Garlic virus C</i>	-
<i>Garlic virus D</i>	-
<i>Leek yellow stripe virus</i>	-
<i>Onion yellow dwarf virus</i>	-
<i>Shallot latent virus</i>	-
<i>Strawberry latent ringspot virus</i>	-
<i>Tobacco mosaic virus</i>	-
<i>Tobacco necrosis virus</i>	-
<i>Tobacco rattle virus</i> [Paeonia and Narcissus infecting strains]	-
<i>Tomato spotted wilt virus</i>	-

Alstroemeria

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Alstroemeria*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, USA.

Quarantine Pests: *Frankliniella occidentalis*, *Liriomyza* spp.

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

B. For Dormant Bulbs:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

1) For bulbs produced under a MAF-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the NAKtuinbouw Elite (Class SEE or EE) or Select (Class A or E) [choose one] bulb certification scheme."

OR

2) For bulbs NOT produced under a MAF-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Tissue Cultures:

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

Andromeda

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Andromeda*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Chrysomyxa ledi*, *Microsphaeria* spp.

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "*Chrysomyxa ledi* and *Microsphaeria* spp. are not known to occur in _____ (the country or state of where the plants were grown) _____".

OR

"The plants were inspected during the growing season and no *Chrysomyxa ledi* or *Microsphaeria* spp. was detected".

2. "The plants have been dipped prior to export in propiconazole at the rate of 0.5g a.i. per litre of water."

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Anemone

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Anemone*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, USA.

Quarantine Pests: Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on _____(the host species being imported)_____ in _____ (the country in which the plants were grown) _____".

B. For Dormant Bulbs:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Anthurium

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Anthurium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Anubias*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Snails, snail eggs, worms, and leeches

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2
Minimum Period: 3 months

Additional Declaration:

"The plants were inspected immediately prior to export and no snails, snail eggs, worms or leeches were detected in a 600 unit sample".

Special Conditions:

i) each aquarium must be clear sided and clearly labelled as follows:

QUARANTINE AQUARIUM

MAF Registration Number:

Name of Quarantine Operator:

- ii) the aquarium must be placed in a watertight tray, the bottom of which must contain a dilute solution of copper sulphate (5 parts per million or a small grain of a copper sulphate crystal in a litre of water);
- iii) must be inside a building which can be secured;
- iv) must be at least 5m away from a non-quarantine aquarium.

B. For Tissue Cultures:

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2

Arbutus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Arbutus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Phytophthora ramorum*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from Australia, Canada, Israel and South Africa (these commodities may only be imported from these countries):

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum*".

B. For Plants in Tissue Culture from All Countries:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Aronia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Gymnosporangium clavipes*, *Gymnosporangium globosum*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants and Tissue Culture:

Option 1

PEQ: Level 2
Minimum Period: 6 months

Additional Declarations:

1. "*Gymnosporangium clavipes* and *Gymnosporangium globosum* are not known to occur on _____(host species being imported) _____ in _____ (the country or state in which the plants were grown) _____".
2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export".

OPTION 2:

PEQ: Level 3
Minimum Period: 3 months

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Arum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Virus diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Asparagus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Asparagus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Puccinia asparagi*; virus diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants and Tissue Culture:

PEQ: Level 3

Minimum Period: 3 months

Aster

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Aster*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: Aster yellows phytoplasma, Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

"Aster yellows phytoplasma is not known to occur in ____ (the country or state where the plants were grown) ____".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested or inspected and found free of Aster yellows phytoplasma".

Beaucarnea

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Beaucarnea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Begonia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Begonia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Virus diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

1) For bulbs produced under a MAF-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 or ALG [choose one] bulb certification scheme."

OR

2) For bulbs NOT produced under a MAF-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Berberis

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Berberis*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants (dormant) or Cuttings (dormant):

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "The plants were inspected during the previous growing season and no rust diseases were detected".
2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water".

Bidens

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Bidens*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from All Countries except Argentina, Belize, the Caribbean Islands, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States of America, Venezuela and Yugoslavia:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration(s):

1. "The plants have been dipped in Furalaxyl at the rate of 0.25g a.i. per litre of water".
2. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Plants in Tissue Culture from All Countries:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Bowenia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Bowenia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All except Australia and Italy

Quarantine Pests: *Demysus meleoides*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Cuttings (dormant), including offsets in the form of dormant buds divided from the trunk:

PEQ: Level 2

Minimum Period: 6 months

Inspection Requirements: A minimum of 600 plants are to be inspected during each inspection in post-entry quarantine

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Calanthe

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Calanthe*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Uredinales, *Tetranychus kanzawai*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 1 year

Additional Declarations:

1. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export".
2. "The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre of water".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Camellia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Camellia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Phytophthora ramorum*; *Tetranychus kanzawai*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from Australia and Canada (these commodities may only be imported from these countries):

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "The plants have been dipped in prochloraz at the rate of 0.5g a.i. per litre of water".
2. "The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum*".

Special Condition: All visible flower buds are to be removed prior to export.

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Camellia sinensis

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Camellia sinensis*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries:	Afghanistan	Iran	Mongolia	Syria
	Armenia	Iraq	Myanmar	Taiwan
	Azerbaijan	Israel	Nepal	Tajikistan
	Bangladesh	Japan	North Korea	Thailand
	Bhutan	Jordan	Oman	Turkey
	Brunei	Kazakstan	Pakistan	Turkmenistan
	Cambodia	Kuwait	Philippines	United Arab Emirates
	China	Kyrgyzstan	Saudi Arabia	Uzbekistan
	Georgia	Laos	Singapore	Vietnam
	India	Lebanon	South Korea	Yemen
	Indonesia	Malaysia	Sri Lanka	

Quarantine Pests: *Exobasidium vexans*; Phloem necrosis; *Phytophthora ramorum*; *Tetranychus kanzawai*.

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

For Whole Plants and Tissue Culture:

PEQ: Level 3
Minimum Period: 3 months

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Canna*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Virus diseases; *Xylella fastidiosa*

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Whole Plants from All Countries except Argentina, Belize, the Caribbean Islands, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States of America, Venezuela and Yugoslavia:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration(s):

"The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

1. “In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

2. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from Countries other than Argentina, Australia, Austria, Belgium, Belize, Canada, the Caribbean Islands, Costa Rica, Denmark, El Salvador, Guatemala, Finland, France, Germany, Greece, Honduras, Ireland, Israel, Italy, Luxembourg, Mexico, The Netherlands, Nicaragua, Panama, Peru, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America, Venezuela and Yugoslavia:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a "Pest free area", free from *Xylella fastidiosa*".

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

D. For Tissue Cultures from All Countries:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Carica*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Papaya mosaic virus, Papaya ringspot virus

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

OPTION 1:

A. For Whole Plants:

PEQ: Level 2
Minimum Period: 3 months

Additional Declaration:

"Papaya mosaic virus and Papaya ringspot virus are not known to occur in _____(the country or state where the plants were grown) _____".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2

PLUS:

Additional Declaration:

"The cultures have been derived from parent material tested and found free of Papaya ringspot virus and Papaya ringspot virus."

OPTION 2:

For Whole Plants and Tissue Cultures:

PEQ: Level 3
Minimum Period: 3 months

Carpinus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Carpinus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests:

Entry Conditions: Basic; with variations and additional conditions as specified below:

For Whole Plants (dormant) or Cuttings (dormant):

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been dipped in a combination of _____ (insert one of the options below) _____, at the rate of 1g a.i. per litre of water, and thiram, at the rate of 1.5g a.i. per litre of water".

Note: One of the following fungicides is to be used:

Benomyl
Carbendazim
Thiophanate methyl

Carya

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Carya*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, USA

Quarantine Pests: *Fusicladium effusum*, Pecan bunch

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration:

"*Fusicladium effusum* and Pecan bunch are not known to occur in _____ (the country or state where the plants were grown) _____".

Carya ovata

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Carya ovata*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Cryphonectria parasitica*;

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Cuttings (dormant) and Whole Plants (dormant) from All Countries:

OPTION 1:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration(s):

"*Cryphonectria parasitica* is not known to occur in _____ (the country or state where the plants/cuttings were produced) _____".

OPTION 2:

PEQ: Level 3

Minimum Period: 6 months

B. For Tissue Cultures from All Countries:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Castanea

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Castanea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Conotrachelus carinifer*, *Curculio* spp., *Ceratocystis fagacearum*, *Cryphonectria parasitica*, *Dryocosmus kuriphilus*, *Phytophthora ramorum*, *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants (dormant) and Cuttings (dormant) and Tissue Culture:

PEQ: Level 3

Minimum Period: 3 months

Additional Declaration:

1. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".
2. "*Cryphonectria parasitica* and *Ceratocystis fagacearum* are not known to occur in _____
(the country or state where the plants were grown) _____".

OR

"The plants were inspected (or the wood was taken from a tree that was inspected) during the previous growing season and no *Cryphonectria parasitica* or *Ceratocystis fagacearum* was detected."

Cedrus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Cedrus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Bursaphelenchus* spp.; *Lophodermium* spp.; Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3

Minimum Period: 6 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Chrysanthemum morifolium

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Chrysanthemum morifolium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Frankliniella occidentalis*, *Liriomyza* spp., virus diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus or virus like diseases."

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Citrus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Citrus* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

2. Pests of *Citrus*

Refer to the pest list.

3. Entry conditions for:

3.1 *Citrus* cuttings from offshore MAF-accredited facilities (quarantine stations)

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Citrus*, the accredited facility operator must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Citrus*.

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Citrus* cuttings exported to New Zealand.

(ii) Inspection, Testing and Treatments of the consignment

The inspection, testing and treatment requirements for specified regulated pests must be undertaken at the accredited facility as specified in the agreement between MAF and the accredited facility operator. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Citrus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

AND

- sourced from either mother plants that have been kept in insect proof plant houses or from open ground mother plants

AND

- held and tested for/classified free from specified regulated pests at a MAF-accredited facility

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country

NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Citrus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with New Zealand's current phytosanitary requirements.

AND

- sourced from mother plants that have been kept in insect proof plant houses/sourced from open ground mother plants [choose one].

AND

- held and tested for/classified free from specified regulated pests at the accredited facility as required in the agreement between MAF and the accredited facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

(v) Post-entry quarantine

PEQ: Level 2

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pathogens. Indicative minimum quarantine periods are: 6 months for *Citrus* cuttings sourced from mother plants that have been kept in insect proof plant houses, or 16 months for *Citrus* cuttings sourced directly from open ground mother plants. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Citrus* cuttings from non-accredited facilities in any country

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Citrus* cuttings exported to New Zealand.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Citrus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Citrus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with the current phytosanitary requirements of MAF."

(iv) Inspection, Testing and Treatments of the consignment

Following inspection at the border, upon arrival, the *Citrus* cuttings will be directed to a facility accredited to the MAF standard BMG-STD-TREAT: *Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export*, to be sprayed/dipped in MAF-approved miticide and insecticides as described in section 2.2.1.6 of the basic conditions.

Following treatment, testing for specified regulated pests must be undertaken at a New Zealand Level 3 MAF-accredited facility. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(v) Post-entry quarantine

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pathogens. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.3 *Citrus* plants in tissue culture from offshore MAF-accredited facilities

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Citrus*, the accredited facility operator must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Citrus*.

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Citrus* tissue culture exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Inspection, Testing and Treatments of the consignment

The inspection, treatment and testing requirements for specified pests must be undertaken at the accredited facility as specified in the arrangement between MAF and the accredited facility operator. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(iv) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Citrus* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

AND

- held and tested for/classified free from specified regulated pests at a MAF-

accredited facility

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

(v) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Citrus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with New Zealand's current phytosanitary requirements.

AND

- held and tested for/classified free from specified regulated pests at the accredited facility as specified in the agreement between MAF and the accredited facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

(vi) Post-entry quarantine

PEQ: Level 2

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.4 *Citrus* plants in tissue culture from non-accredited facilities in any country

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Citrus* nursery stock exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Citrus* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Citrus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with the current phytosanitary requirements of MAF."

(v) Inspection, Testing and Treatments of the consignment

Upon arrival, the inspection, treatment and testing requirements for specified pests must be undertaken at a New Zealand Level 3 MAF-accredited facility. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(vi) Post-entry quarantine

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pests. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected or treatments/testing are required.

Pest List for *Citrus*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Bostrichidae

Apate indistincta

shot-hole borer

Apate terebrans

shot-hole borer

Buprestidae

Agrilus alesi

flatheaded citrus borer

Agrilus auriventris

citrus flatheaded borer

Cerambycidae

Anoplophora malasiaca

white-spotted longicorn beetle

Chelidonium gibbicolle

-

Dihammus vastator

fig longhorn

Melanauster chinensis

-

Paradisterna plumifera

speckled longicorn

Promeces linearis

-

Skeletodes tetrops

longhorn beetle

Strongylurus thoracicus

pittosporum longicorn

Uracanthus cryptophagus

citrus branch borer

Chrysomelidae

Colasposoma fulgidum

bluegreen citrus nibbler

Colasposoma scutellare

-

Geloptera porosa

pitted apple beetle

Luperomorpha funesta

mulberry flea beetle

Monolepta australis

red-shouldered leaf beetle

Sebaethe fulvipennis

flea beetle

Coccinellidae

Cheilomenes lunata [Animals Biosecurity]

-

Chilocorus cacti [Animals Biosecurity]

-

Chilocorus distigma [Animals Biosecurity]

-

Chilocorus nigrita [Animals Biosecurity]

-

Exochomus flavipes [Animals Biosecurity]

-

Penttilia castanea [Animals Biosecurity]

-

Rhyzobius lophanthae [Animals Biosecurity]

-

Scymnus nanus [Animals Biosecurity]

-

Serangium parcesetosum [Animals Biosecurity]

-

Stethorus aethiops [Animals Biosecurity]

-

Stethorus histrio [Animals Biosecurity]

-

Stethorus punctata picipes [Animals Biosecurity]

-

Curculionidae

Amystax fasciatus [Animals Biosecurity]

-

Artipus sp.

-

Brachycerus citriperda

-

Callirhopalus bifasciatus

two-banded Japanese weevil

Dereodus recticollis

-

Diaprepes abbreviatus

citrus weevil

Diaprepes spp.

-

Eutinophaea bicristata

citrus leaf-eating weevil

Leptopius squalidus

fruit tree root weevil

Naupactus xanthographus

fruit tree weevil

Otiiorhynchus cribricollis

cribrate weevil

Pachnaeus citri

-

Pachnaeus litus

citrus root weevil

Perperus lateralis

white-striped weevil

<i>Prepodes</i> spp.	-
<i>Protostrophus avidus</i>	weevil
<i>Sciobius marshalli</i>	citrus snout beetle
<i>Sympiezomias lewisi</i>	-
Lucanidae	
<i>Prosopocoilus spencei</i>	-
Scarabaeidae	
<i>Hypopholis indistincta</i>	scarab beetle
<i>Maladera matrida</i>	scarab beetle
Scolytidae	
<i>Salagena</i> sp.	-
<i>Xylosandrus germanus</i>	alnus ambrosia beetle
Diptera	
Cecidomyiidae	
<i>Contarinia citri</i>	leafcurling midge
<i>Contarinia okadai</i>	citrus flower gall midge
<i>Trisopsis</i> sp.	-
Chamaemyiidae	
<i>Leucopis alticeps</i> [Animals Biosecurity]	-
Drosophilidae	
<i>Drosophila paulistorum</i>	-
<i>Drosophila pseudoobscura</i>	-
<i>Drosophila simulans</i>	-
<i>Drosophila willistoni</i>	-
Tephritidae	
<i>Dirioxa pornia</i>	island fruit fly
Hemiptera	
Anthocoridae	
<i>Orius thripoborus</i> [Animals Biosecurity]	-
<i>Thripheps thripoborus</i> [Animals Biosecurity]	-
Coreidae	
<i>Acanthocoris striicornis</i>	larger squash bug
<i>Anoplocnemis curvipes</i>	coreid bug
<i>Leptoglossus membranaceus</i>	coreid bug
<i>Mictis profana</i>	crusader bug
<i>Paradasynus spinosus</i>	squash bug
<i>Veneza phyllopus</i>	leaf-footed bug
Lygaeidae	
<i>Nysius vinitor</i>	Rutherglen bug
Miridae	
<i>Austropeplus</i> sp.	citrus blossom bug
Pentatomidae	
<i>Antestia variegata</i>	antestia bug
<i>Antestiopsis orbitalis</i>	-
<i>Antestiopsis variegata</i>	antestia bug
<i>Biprorulus bibax</i>	spined citrus bug
<i>Glaucias subpunctatus</i>	polished green stink bug
<i>Halyomorpha mista</i>	brown-marmorated stink bug
<i>Musgraveia sulciventris</i>	bronze orange bug
<i>Plautia stali</i>	oriental stink bug
<i>Rhynchocoris humeralis</i>	pentatomid bug
Unknown Hemiptera	
<i>Holopterna vulga</i>	bug
Homoptera	
Aleyrodidae	
<i>Aleurocanthus citripertus</i>	whitefly
<i>Aleurocanthus spiniferus</i>	orange spiny whitefly
<i>Aleurocanthus</i> spp.	whiteflies
<i>Aleurocanthus woglumi</i>	citrus blackfly
<i>Aleurodicus dispersus</i>	spiralling whitefly

<i>Aleurolobus marlatti</i>	Marlatt whitefly
<i>Aleuroplatus</i> sp.	whitefly
<i>Aleurothrixus floccosus</i>	woolly whitefly
<i>Aleurotuba jelinekii</i>	-
<i>Aleurotuberculatus aucubae</i>	aucuba whitefly
<i>Bemisia citricola</i>	-
<i>Dialeurodes citri</i>	citrus whitefly
<i>Dialeurodes citrifolii</i>	cloudywinged whitefly
<i>Dialeurolonga</i> sp.	-
<i>Parabemisia myricae</i>	Japanese bayberry whitefly
<i>Siphoninus phillyreae</i>	phillyrea whitefly
Aphididae	
<i>Aphis fabae</i>	bean aphid
<i>Aulacorthum magnoliae</i>	Japanese elder aphid
Cicadellidae	
<i>Asymmetrasca decedens</i>	leafhopper
<i>Circulifer opacipennis</i>	-
<i>Circulifer tenellus</i>	beet leafhopper
<i>Cuerna costalis</i>	leafhopper
<i>Edwardsiana flavescens</i>	leafhopper
<i>Empoasca bodenheimeri</i>	-
<i>Empoasca citrusa</i>	green citrus leafhopper
<i>Empoasca decipiens</i>	green leafhopper
<i>Empoasca distinguenda</i>	-
<i>Empoasca fabae</i>	potato leafhopper
<i>Empoasca onukii</i>	tea green leafhopper
<i>Homalodisca coagulata</i>	glassy-winged sharpshooter
<i>Homalodisca lacerta</i>	-
<i>Jacobiasca lybica</i>	cotton jassid
<i>Neoliturus haematoceps</i>	leafhopper
<i>Penthimiola bella</i>	citrus leafhopper
<i>Scaphytopius nitridus</i>	leafhopper
Cicadidae	
<i>Cryptotympana facialis</i>	black cicada
<i>Meimuna opalifera</i>	elongate cicada
Coccidae	
<i>Ceroplastes floridensis</i>	Florida wax scale
<i>Ceroplastes japonicus</i>	pink wax scale
<i>Ceroplastes rubens</i>	red wax scale
<i>Ceroplastes rusci</i>	fig wax scale
<i>Coccus celatus</i>	-
<i>Coccus pseudomagnoliarum</i>	citricola scale
<i>Coccus viridis</i>	green scale
<i>Cribrolecanium andersoni</i>	white powdery scale
<i>Gascardia brevicauda</i>	white waxy scale
<i>Protopulvinaria pyriformis</i>	pyriform scale
<i>Pulvinaria aethiopica</i>	soft green scale
<i>Pulvinaria aurantii</i>	citrus cottony scale
<i>Pulvinaria cellulosa</i>	pulvinaria scale
<i>Saissetia citricola</i>	citrus string cottony scale
<i>Saissetia somereni</i>	-
Dactylopiidae	
<i>Dactylopius filamentosis</i>	-
<i>Dactylopius vastator</i>	-
Diaspididae	
<i>Aonidiella citrina</i>	yellow scale
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Chrysomphalus bifasciculatus</i>	brown scale
<i>Chrysomphalus dictyospermi</i>	dictyospermum scale
<i>Chrysomphalus pinnulifera</i>	false purple scale

<i>Ischnaspis longirostris</i>	black thread scale
<i>Lepidosaphes beckii</i>	purple scale
<i>Lepidosaphes gloverii</i>	Glover scale
<i>Parlatoria ziziphi</i>	black parlatoria scale
<i>Pseudaonidia duplex</i>	camphor scale
<i>Selenaspidus articulatus</i>	West Indian red scale
<i>Unaspis citri</i>	citrus snow scale
<i>Unaspis yanonensis</i>	Japanese citrus scale
Flatidae	
<i>Colgar peracuta</i>	-
<i>Geisha distinctissima</i>	green broad-winged planthopper
<i>Lawana conspersa</i>	green flatid planthopper
<i>Metcalfa pruinosa</i>	planthopper
Fulgoridae	
<i>Anzora unicolor</i>	-
Margarodidae	
<i>Drosicha howardi</i>	persimmon mealybug
<i>Icerya seychellarum</i>	Seychelles scale
Ortheziidae	
<i>Nipponorthezia ardisiae</i>	ensign scale
Pseudococcidae	
<i>Allococcus</i> spp.	-
<i>Ferrisia consobrina</i>	mealybug
<i>Ferrisia virgata</i>	striped mealybug
<i>Nipaecoccus vastator</i>	nipa mealybug
<i>Nipaecoccus viridis</i>	hibiscus mealybug
<i>Paracoccus burnerae</i>	spherical mealybug
<i>Planococcus kraunhiae</i>	Japanese wisteria mealybug
<i>Planococcus lilacinus</i>	citrus mealybug
<i>Planococcus minor</i>	passionvine mealybug
<i>Pseudococcus citriculus</i>	smaller citrus mealybug
<i>Pseudococcus commonus</i>	-
<i>Pseudococcus filamentosus</i>	mealybug
<i>Rastrococcus spinosus</i>	mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
Psyllidae	
<i>Diaphorina citri</i>	citrus psyllid
<i>Trioza erytrae</i> [vector]	citrus psyllid
Ricaniidae	
<i>Scolypopa</i> sp.	-
Tropiduchidae	
<i>Tambinia</i> sp.	-
Hymenoptera	
Aphelinidae	
<i>Aphytis africanus</i> [Animals Biosecurity]	-
<i>Aphytis holoxanthus</i> [Animals Biosecurity]	-
<i>Aphytis lepidosaphes</i> [Animals Biosecurity]	-
<i>Aphytis lingnanensis</i> [Animals Biosecurity]	-
<i>Aphytis melinus</i> [Animals Biosecurity]	-
<i>Azotus platensis</i> [Animals Biosecurity]	-
<i>Cales noacki</i> [Animals Biosecurity]	-
<i>Cales orchamoplati</i> [Animals Biosecurity]	-
<i>Centrodora penthimiae</i> [Animals Biosecurity]	-
<i>Coccophagus caridei</i> [Animals Biosecurity]	-
<i>Coccophagus pulvinariae</i> [Animals Biosecurity]	-
<i>Encarsia ectophaga</i> [Animals Biosecurity]	-
<i>Encarsia lahorensis</i> [Animals Biosecurity]	-
<i>Encarsia lounsburyi</i> [Animals Biosecurity]	-
<i>Encarsia opulenta</i> [Animals Biosecurity]	-
<i>Encarsia smithi</i> [Animals Biosecurity]	-

<i>Eretmocerus serius</i> [Animals Biosecurity]	-
<i>Marietta connecta</i> [Animals Biosecurity]	-
<i>Marietta leopardina</i> [Animals Biosecurity]	-
Braconidae	
<i>Apanteles aristotalilae</i> [Animals Biosecurity]	-
<i>Biosteres longicaudatus</i> [Animals Biosecurity]	-
<i>Pholetesor ornigis</i> [Animals Biosecurity]	-
Encyrtidae	
<i>Anicetus beneficus</i> [Animals Biosecurity]	-
<i>Comperiella bifasciata</i> [Animals Biosecurity]	-
<i>Habrolepis rouxi</i> [Animals Biosecurity]	-
<i>Leptomastix dactylopii</i> [Animals Biosecurity]	parasitic wasp
<i>Metaphycus helvolus</i> [Animals Biosecurity]	-
<i>Metaphycus luteolus</i> [Animals Biosecurity]	-
<i>Metaphycus stanleyi</i> [Animals Biosecurity]	-
<i>Metaphycus varius</i> [Animals Biosecurity]	-
<i>Psyllaephagus pulvinatus</i> [Animals Biosecurity]	-
Eulophidae	
<i>Aprostocetus ceroplastae</i> [Animals Biosecurity]	-
<i>Elachertus fenestratus</i> [Animals Biosecurity]	-
<i>Tamarixia radiatus</i> [Animals Biosecurity]	-
Eupelmidae	
<i>Anastatus biproruli</i> [Animals Biosecurity]	-
Eurytomidae	
<i>Bruchophagus fellis</i>	citrus gall midge
Formicidae	
<i>Acromyrmex octospinosus</i>	leaf-cutting ant
<i>Anoplolepis braunsi</i> [Animals Biosecurity]	-
<i>Anoplolepis custodiens</i>	ant
<i>Anoplolepis steingroeveri</i> [Animals Biosecurity]	black ant
<i>Atta cephalotes</i>	leaf-cutting ant
<i>Atta sexdens</i>	-
<i>Atta texana</i>	Texas leaf-cutting ant
<i>Camponotus rufoglaucus</i>	-
<i>Crematogaster castanea</i>	-
<i>Crematogaster liengmei</i>	-
<i>Crematogaster peringueyi</i> [Animals Biosecurity]	cocktail ant
<i>Lepisiota capensis</i> [Animals Biosecurity]	-
<i>Myrmecaria natalensis</i>	-
<i>Pheidole tenuinodis</i>	ant
<i>Polyrhachis schistaceus</i>	ant
<i>Solenopsis invicta</i> [Animals Biosecurity]	red imported fire ant
<i>Tapinoma arnoldi</i>	-
<i>Technomyrmex albipes foreli</i> [Animals Biosecurity]	-
Mymaridae	
<i>Chaetomyrmex gracile</i> [Animals Biosecurity]	-
<i>Chaetomyrmex lepidum</i> [Animals Biosecurity]	-
<i>Gonatocerus incomptus</i> [Animals Biosecurity]	-
Platygasteridae	
<i>Amitus hesperidum</i> [Animals Biosecurity]	-
<i>Amitus spiniferus</i> [Animals Biosecurity]	-
<i>Fidiobia citri</i> [Animals Biosecurity]	-
Scelionidae	
<i>Trissolcus oeneus</i> [Animals Biosecurity]	-
<i>Trissolcus oenone</i> [Animals Biosecurity]	-
<i>Trissolcus ogyges</i> [Animals Biosecurity]	-
Signiphoridae	
<i>Signiphora fax</i> [Animals Biosecurity]	-
<i>Signiphora flavella</i> [Animals Biosecurity]	-
<i>Signiphora perpauca</i> [Animals Biosecurity]	-

Trichogrammatidae	
<i>Trichogramma platneri</i> [Animals Biosecurity]	-
Vespidae	
<i>Polistes</i> spp. [Animals Biosecurity]	paper wasps
Isoptera	
Termitidae	
<i>Odontotermes lokanandi</i>	termite
Lepidoptera	
Arctiidae	
<i>Lemyra imparilis</i>	mulberry tiger moth
Blastobasidae	
<i>Holocera iceryaeella</i>	-
Cosmopterigidae	
<i>Pyroderces rileyi</i>	pink scavenger caterpillar
Geometridae	
<i>Anacamptodes fragilaria</i>	koa haole looper
<i>Ascotis selenaria reciprocaria</i>	citrus looper
<i>Gymnoscelis rufifasciata</i>	geometrid moth
<i>Hyposidra talaca</i>	-
Gracillariidae	
<i>Phyllocnistis citrella</i>	citrus leafminer
Hepialidae	
<i>Endoclyta excrescens</i>	Japanese swift moth
<i>Endoclyta sinensis</i>	-
Lycaenidae	
<i>Virachola isocrates</i>	pomegranate butterfly
Lymantriidae	
<i>Orgyia vetusta</i>	western tussock moth
Metarbelidae	
<i>Indarbela tetraonis</i>	stem borer
Noctuidae	
<i>Arcte coerulea</i>	fruit-piercing moth
<i>Eudocima fullonia</i>	fruit-piercing moth
<i>Helicoverpa assulta</i>	cape gooseberry budworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Tiracola plagiata</i>	banana fruit caterpillar
<i>Xylomyges curialis</i>	noctuid moth
Nymphalidae	
<i>Charaxes jasius</i>	nymphalid butterfly
Oecophoridae	
<i>Psorosticha melanocrepida</i>	citrus leafroller
<i>Psorosticha zizyphi</i>	citrus leafroller
<i>Stathmopoda auriferella</i>	apple heliodinid
Papilionidae	
<i>Papilio aegeus aegeus</i>	-
<i>Papilio anactus</i>	small citrus butterfly
<i>Papilio cresphontes</i>	orange dog
<i>Papilio dardanus cenea</i>	-
<i>Papilio demodocus</i>	orange dog
<i>Papilio demoleus demoleus</i>	-
<i>Papilio helenus nicconicolens</i>	-
<i>Papilio machaon asiatica</i>	-
<i>Papilio memnon</i>	citrus swallowtail
<i>Papilio memnon thunbergii</i>	-
<i>Papilio nireus lyaeus</i>	-
<i>Papilio polytes polytes</i>	-
<i>Papilio protenor demetrius</i>	-
<i>Papilio xuthus</i>	citrus swallowtail
<i>Papilio zelicaon</i>	anise swallowtail
Psychidae	

<i>Eumeta hardenbergi</i>	-
<i>Eumeta japonica</i>	-
<i>Eumeta minuscula</i>	tea bagworm
<i>Eumeta moddermanni</i>	-
<i>Hyalarcta huebneri</i>	leaf case moth
Pyralidae	
<i>Apomyelois ceratoniae</i>	date pyralid
Tortricidae	
<i>Adoxophyes</i> sp.	-
<i>Amorbia cuneana</i>	leafroller
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Archips machlopiis</i>	leafroller
<i>Archips occidentalis</i>	leafroller
<i>Archips rosanus</i>	rose leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Cryptophlebia batrachopa</i>	-
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Homona magnanima</i>	oriental tea tortrix
<i>Isotenes miserana</i>	orange fruitborer
<i>Platynota stultana</i>	omnivorous leafroller
<i>Tortrix capensana</i>	tortricid moth
Yponomeutidae	
<i>Prays citri</i>	citrus flower moth
<i>Prays parillis</i>	citrus flower moth
Neuroptera	
Chrysopidae	
<i>Chrysopa oculata</i> [Animals Biosecurity]	-
Coniopterygidae	
<i>Coniopteryx vicina</i> [Animals Biosecurity]	-
<i>Conwentzia barretti</i> [Animals Biosecurity]	-
Orthoptera	
Acrididae	
<i>Zonocerus elegans</i>	elegant grasshopper
Gryllidae	
<i>Ornebius kanetataki</i>	cricket
Tettigoniidae	
<i>Caedicia</i> sp.	-
<i>Holochlora japonica</i>	Japanese broadwinged katydid
<i>Microcentrum retinerve</i>	smaller angular-winged katydid
<i>Scudderia furcata</i>	fork-tailed bush katydid
Psocoptera	
Archipsocidae	
<i>Archipsocus</i> sp.	bark louse
Thysanoptera	
Aeolothripidae	
<i>Franklinothrips vespiformis</i> [Animals Biosecurity]	-
Thripidae	
<i>Chaetanaphothrips orchidii</i>	banana rust thrips
<i>Leptothrips mali</i>	black hunter thrips
<i>Scirtothrips aurantii</i>	citrus thrips
<i>Scirtothrips citri</i>	citrus thrips
<i>Scirtothrips dorsalis</i>	chilli thrips
<i>Scirtothrips mangiferae</i>	mango thrips
<i>Scolothrips sexmaculatus</i> [Animals Biosecurity]	-
<i>Taeniothrips kellyanus</i>	-
<i>Taeniothrips</i> sp.	-
<i>Thrips coloratus</i>	thrips
<i>Thrips flavus</i>	flower thrips
<i>Thrips palmi</i>	palm thrips

Unknown Insecta
Unknown Insecta

Cosmophyllum pallidulum -

Mite

Arachnida

Acarina

Acaridae

Thyreophagus entomophagus italicus [Animals Biosecurity] -

Anystidae

Anystis agilis [Animals Biosecurity] -

Eriophyidae

Aculops pelekassi eriophyid mite

Tegolophus australis brown citrus mite

Phytoseiidae

Amblyseius addoensis [Animals Biosecurity] -

Amblyseius citri [Animals Biosecurity] -

Amblyseius swirskii [Animals Biosecurity] -

Euseius hibisci [Animals Biosecurity] -

Euseius scutalis [Animals Biosecurity] -

Euseius stipulatus [Animals Biosecurity] -

Euseius tularensis [Animals Biosecurity] -

Iphiseius degenerans [Animals Biosecurity] predatory mite

Typhlodromus athiasae [Animals Biosecurity] -

Stigmaeidae

Agistemus africanus [Animals Biosecurity] -

Agistemus tranatalensis [Animals Biosecurity] -

Eryngiopus siculus [Animals Biosecurity] -

Tarsonemidae

Tarsonemus cryptocephalus [Animals Biosecurity] -

Tenuipalpidae

Brevipalpus chilensis false spider mite

Brevipalpus lewisi bunch mite

Brevipalpus obovatus privet mite

Tenuipalpus emeticae [Animals Biosecurity] -

Tuckerella ornata -

Ultratenuipalpus gonianaensis tenuipalpid mite

Tetranychidae

Calacarus citrifolii clover mite

Eotetranychus kankitus tetranychid mite

Eotetranychus lewisi big beaked plum mite

Eotetranychus yumensis Yumi spider mite

Eutetranychus africanus tetranychid mite

Eutetranychus banksi Texas citrus mite

Eutetranychus orientalis pear leaf blister mite

Oligonychus mangiferus mango spider mite

Tetranychus kanzawai kanzawa mite

Tuckerellidae

Tuckerella knorri hawthorn spider mite

Spider

Arachnida

Araneae

Clubionidae

Cheiracanthium mildei [Animals Biosecurity] -

Theridiidae

Theridion sp. [Animals Biosecurity] -

Mollusc

Gastropoda

Stylommatophora	
Achatinidae	
<i>Achatina immaculata</i>	-
<i>Lissachatina immaculata</i>	snail
Bradybaenidae	
<i>Acusta despecta sieboldiana</i>	snail
Subulinidae	
<i>Rumina decollata</i>	snail
Urocyclidae	
<i>Urocyclus flavescens</i>	-
<i>Urocyclus kirkii</i>	-
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
<i>Diaporthe rudis</i> (anamorph <i>Phomopsis rudis</i>)	phomopsis canker
Dothideales	
Elsinoaceae	
<i>Elsinoe australis</i>	sweet orange scab
Capnodiaceae	
<i>Capnodium citri</i>	sooty mould
Didymosphaeriaceae	
<i>Didymosphaeria</i> sp.	--
Mycosphaerellaceae	
<i>Guignardia citricarpa</i> (anamorph <i>Phyllosticta citricarpa</i>) [black spot strain]	citrus black spot
<i>Mycosphaerella citri</i> (anamorph <i>Stenella citri-grisea</i>)	rind blotch
<i>Mycosphaerella horii</i>	greasy spot
Patellariales	
Patellariaceae	
<i>Rhytidhysteron rufulum</i>	--
Saccharomycetales	
Saccharomycetaceae	
<i>Debaryomyces hansenii</i>	-
<i>Galactomyces citri-aurantii</i> (anamorph <i>Geotrichum citri-aurantii</i>)	sour rot
Basidiomycota: Basidiomycetes	
Boletales	
Coniophoraceae	
<i>Coniophora eremophila</i>	brown wood rot
Basidiomycota: Teliomycetes	
Septobasidiales	
Septobasidiaceae	
<i>Septobasidium pseudopedicellatum</i>	felt fungus
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
<i>Sphaceloma fawcettii</i> var. <i>scabiosa</i>	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophoma mantegazziana</i>	-
<i>Phoma erratica</i> var. <i>mikan</i>	--
<i>Phoma tracheiphila</i>	mal secco
<i>Phomopsis</i> sp.	rot
<i>Septoria</i> spp.	-
<i>Sphaeropsis tumefaciens</i>	stem gall
Unknown Coelomycetes	
Unknown Coelomycetes	

<i>Aschersonia placenta</i> [Animals Biosecurity]	--
<i>Gloeosporium follicolum</i>	fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria limicola</i>	-
<i>Alternaria pellucida</i>	--
<i>Cercospora microsora</i>	-
<i>Phaeoramularia angolensis</i>	cercospora spot
<i>Stemphylium rosarium</i>	--
<i>Ulocladium obovoideum</i>	ulocladium rot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Aureobasidium</i> sp.	-
<i>Hirsutella thompsonii</i> [Animals Biosecurity]	--
<i>Isaria</i> sp. [Animals Biosecurity]	-
<i>Oidium tingitaninum</i>	powdery mildew
<i>Sporobolomyces roseus</i>	--
<i>Stenella</i> sp.	--
Zygomycota: Zygomycetes	
Glomales	
Glomaceae	
<i>Glomus etunicatum</i> [Animals Biosecurity]	--
Mucorales	
Syncephalastraceae	
<i>Syncephalastrum racemosum</i>	--
Bacterium	
Bacterium family unknown	
<i>Liberobacter africanum</i>	citrus greening bacterium
<i>Liberobacter asiaticum</i>	citrus greening bacterium
<i>Liberobacter</i> sp.	citrus greening bacterium
<i>Spiroplasma citri</i>	citrus stubborn
Pseudomonadaceae	
<i>Burkholderia cepacia</i>	sour skin
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	citrus canker
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	-
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	citrus bacterial spot
<i>Xylella fastidiosa</i>	Pierce's disease
<i>Xylella fastidiosa</i> pv. <i>citri</i>	variegated chlorosis of citrus
Virus	
Indian citrus mosaic badnavirus	-
citrus cachexia viroid	-
citrus chlorotic dwarf	-
citrus infectious variegation ilarvirus	-
citrus infectious variegation ilarvirus [crinkly leaf strain]	-
citrus leaf rugose ilarvirus	-
citrus leathery leaf virus	-
citrus leprosis rhabdovirus	-
citrus mosaic virus	-
citrus ringspot virus	-
citrus tatter leaf capillovirus	-
citrus tristeza closterovirus [strains not in New Zealand]	-
citrus variable viroid	-
citrus viroids (groups I-IV)	-
citrus yellow mosaic badnavirus	-
citrus yellow mottle virus	-
dwarfing factor viroid	-
navel orange infectious mottling virus	-

satsuma dwarf nepovirus	-
satsuma dwarf nepovirus [Natsudaikai dwarf strain]	-
xyloporosis viroid	-
yellow vein clearing of lemon	-

Phytoplasma

<i>Candidatus</i> Phytoplasma aurantifolia	witches' broom phytoplasma
rubbery wood	-

Disease of unknown aetiology

Australian citrus dieback	-
blind pocket	-
bud union disease	-
citrus blight disease	-
citrus fatal yellows	-
citrus impletatura disease	-
citrus sunken vein disease	-
concave gum	-
crisacortis	-
gum pocket	-
gummy bark	-
kassala disease	-
lemon sieve tube necrosis	-
shell bark of lemons	-
zonate chlorosis	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Anthribidae

Araecerus fasciculatus coffee bean weevil

Cerambycidae

Oemona hirta lemon tree borer

Coccinellidae

Cryptolaemus montrouzieri mealybug destroyer

Rodolia cardinalis [Animals Biosecurity]

Curculionidae

Asynonychus cervinus Fuller's rose weevil

Listroderes obliquus vegetable weevil

Maleuterpes spinipes dicky rice weevil

Phlyctinus callosus banded fruit weevil

Scarabaeidae

Costelytra zealandica grass grub

Diptera

Cryptochaetidae

Cryptochetum iceryae [Animals Biosecurity]

Drosophilidae

Drosophila melanogaster vinegar fly

Hemiptera

Pentatomidae

Nezara viridula green vegetable bug

Homoptera

Aleyrodidae

Orchamoplatus citri Australian citrus whitefly

Aphididae

Aphis craccivora cowpea aphid

Aphis gossypii cotton aphid

Aphis nerii oleander aphid

Aphis spiraeicola spirea aphid

Macrosiphum euphorbiae potato aphid

Myzus cerasi black cherry aphid

Myzus persicae green peach aphid

Toxoptera aurantii black citrus aphid

Toxoptera citricida brown citrus aphid

Coccidae

Ceroplastes ceriferus Indian white wax scale

Ceroplastes destructor white wax scale

Ceroplastes sinensis Chinese wax scale

Coccus hesperidum brown soft scale

Coccus longulus long brown scale

Saissetia coffeae hemispherical scale

Saissetia oleae black scale

Diaspididae

Aonidiella aurantii California red scale

Aspidiotus hederiae oleander scale

Aspidiotus nerii oleander scale

Diaspis santali scale

Lindingaspis rossi Ross' black scale

Lopholeucaspis japonica pear white scale

Parlatoria pergandii chaff scale

Pinnaspis aspidistrae fern scale

Quadraspidiotus perniciosus San Jose scale

Flatidae	
<i>Siphanta acuta</i>	green planthopper
Margarodidae	
<i>Icerya purchasi</i>	cottony cushion scale
Pseudococcidae	
<i>Planococcus citri</i>	citrus mealybug
<i>Planococcus mali</i>	-
<i>Pseudococcus calceolariae</i>	citrophilus mealybug
<i>Pseudococcus longispinus</i>	longtailed mealybug
<i>Pseudococcus viburni</i>	obscure mealybug
Ricaniidae	
<i>Scolytopa australis</i>	passionvine hopper
Hymenoptera	
Aphelinidae	
<i>Aphytis chrysomphali</i> [Animals Biosecurity]	-
<i>Encarsia citrina</i> [Animals Biosecurity]	-
<i>Encarsia perniciosi</i> [Animals Biosecurity]	-
Encyrtidae	
<i>Coccidoctonus dubius</i> [Animals Biosecurity]	-
Formicidae	
<i>Linepithema humile</i> [Animals Biosecurity]	Argentine ant
<i>Pheidole megacephala</i> [Animals Biosecurity]	big-headed ant
Lepidoptera	
Geometridae	
<i>Pseudocoremia dejectaria</i>	-
<i>Pseudocoremia suavis</i>	pine looper
Hepialidae	
<i>Aenetus virescens</i>	puriri moth
Noctuidae	
<i>Helicoverpa armigera</i>	tomato fruitworm
<i>Spodoptera litura</i>	cluster caterpillar
Oecophoridae	
<i>Stathmopoda phlyegyra</i> [Animals Biosecurity]	-
Tortricidae	
<i>Cnephasia jactatana</i>	black lyre leafroller
<i>Ctenopseustis obliquana</i>	brownheaded leafroller
<i>Epalxiphora axenana</i>	-
<i>Epiphyas postvittana</i>	light brown apple moth
<i>Planotortrix excessana</i>	greenheaded leafroller
Orthoptera	
Tettigoniidae	
<i>Caedicia simplex</i>	katydid
Thysanoptera	
Phlaeothripidae	
<i>Nesothrips propinquus breviceps</i>	-
Thripidae	
<i>Frankliniella occidentalis</i>	western flower thrips
<i>Heliothrips haemorrhoidalis</i>	greenhouse thrips
<i>Pezothrips kellyanus</i>	Kelly's citrus thrips
<i>Thrips hawaiiensis</i>	Hawaiian flower thrips
<i>Thrips obscuratus</i>	New Zealand flower thrips
<i>Thrips tabaci</i>	onion thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
<i>Aceria sheldoni</i>	citrus bud mite
<i>Phyllocoptruta oleivora</i>	citrus rust mite
Phytoseiidae	

<i>Phytoseiulus persimilis</i> [Animals Biosecurity]	predatory mite
Stigmaeidae	
<i>Eryngiopus bifidus</i> [Animals Biosecurity]	-
Tarsonemidae	
<i>Polyphagotarsonemus latus</i>	broad mite
Tenuipalpidae	
<i>Brevipalpus californicus</i>	bunch mite
<i>Brevipalpus phoenicis</i>	passionvine mite
Tetranychidae	
<i>Eotetranychus sexmaculatus</i>	sixspotted mite
<i>Panonychus citri</i>	citrus red mite
<i>Tetranychus cinnabarinus</i>	carmine spider mite
<i>Tetranychus urticae</i>	twospotted spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
<i>Helix aspersa</i>	common garden snail
Limacidae	
<i>Deroceras reticulatum</i>	grey garden slug
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
<i>Diaporthe citri</i> (anamorph <i>Phomopsis citri</i>)	melanose
Diatrypales	
Diatrypaceae	
<i>Eutypa lata</i>	eutypa dieback
Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria dothidea</i> (anamorph <i>Fusicoccum aesculi</i>)	canker
<i>Botryosphaeria rhodina</i>	gummosis
Capnodiaceae	
<i>Capnodium salicinum</i>	sooty mould
Elsinoaceae	
<i>Elsinoe fawcettii</i> (anamorph <i>Sphaceloma fawcettii</i>)	verrucosis
Mycosphaerellaceae	
<i>Guignardia citricarpa</i> (anamorph <i>Phyllosticta citricarpa</i>) [non-pathogenic strain]	latent skin infection
<i>Mycosphaerella pinodes</i> (anamorph <i>Ascochyta pinodes</i>)	mycosphaerella blight
<i>Mycosphaerella tassiana</i> (anamorph <i>Cladosporium herbarum</i>)	black leaf spot
Pleosporaceae	
<i>Pleospora herbarum</i> (anamorph <i>Stemphylium herbarum</i>)	black mould rot
Hypocreales	
Hypocreaceae	
<i>Gibberella baccata</i> (anamorph <i>Fusarium lateritium</i>)	fusarium rot
<i>Gibberella fujikuroi</i> (anamorph <i>Fusarium fujikuroi</i>)	fusarium rot
<i>Gibberella intricans</i> (anamorph <i>Fusarium equiseti</i>)	root and stem dry rot
<i>Nectria haematococca</i> (anamorph <i>Fusarium solani</i>)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould
<i>Sclerotinia sclerotiorum</i>	cottony rot
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	anthracnose
Saccharomycetales	

Dipodascaceae	
<i>Dipodascus geotrichum</i> (anamorph <i>Geotrichum candidum</i>)	sour rot
Endomycetaceae	
<i>Endomyces geotrichum</i>	endomyces
Xylariales	
Xylariaceae	
<i>Ustulina deusta</i>	coal fungus
Basidiomycota: Basidiomycetes	
Stereales	
Hyphodermataceae	
<i>Erythricium salmonicolor</i> (anamorph <i>Necator decretus</i>)	pink disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Leptostromataceae	
<i>Gloeodes pomigena</i>	sooty blotch
Sphaerioidaceae	
<i>Ascochyta corticola</i>	ascochyta rot
<i>Lasiodiplodia theobromae</i>	fruit and stem-end rot
<i>Septoria citri</i>	septoria spot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Alternaria citri</i>	alternaria rot
<i>Alternaria hesperidearum</i>	--
Moniliaceae	
<i>Aspergillus flavus</i>	aspergillus storage rot
<i>Aspergillus niger</i>	aspergillus rot
<i>Penicillium digitatum</i>	green mould
<i>Penicillium italicum</i>	blue mould
<i>Penicillium ulaiense</i>	penicillium mould
<i>Verticillium lecanii</i> [Animals Biosecurity]	--
Tuberculariales	
Tuberculariaceae	
<i>Fusarium culmorum</i>	dry rot
<i>Fusarium oxysporum</i>	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Trichothecium roseum</i>	pink rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora citricola</i>	brown rot of fruit
<i>Phytophthora citrophthora</i>	citrus brown rot
<i>Phytophthora hibernalis</i>	citrus brown rot
<i>Phytophthora nicotianae</i> var. <i>parasitica</i>	collar and root rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus stolonifer</i>	rhizopus soft rot
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas corrugata</i>	tomato pith necrosis
<i>Pseudomonas fluorescens</i>	pink eye
<i>Pseudomonas syringae</i>	bacterial blast
<i>Pseudomonas syringae</i> pv. <i>syringae</i>	bacterial soft rot
Virus	
citrus enation - woody gall luteovirus	-

citrus exocortis viroid	-
citrus psorosis A	-
citrus psorosis B	-
citrus tristeza closterovirus [seedling yellows, decline, and stem pitting strains (except Hassuku dwarf, Capao Bonito, and Queensland and South African orange stem pitting strains)]	-
hop stunt viroid	-

Inspection, Testing and Treatment Requirements for *Citrus**

ORGANISM TYPES	MAF ACCEPTABLE METHODS
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions).
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions).
Fungus	Country freedom OR growing season inspection for symptom expression.
Bacterium	
<i>Burkholderia cepacia</i>	Growing season inspection for symptom expression.
<i>Liberobacter africanum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Liberobacter asiaticum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Spiroplasma citri</i>	Country freedom/shoot tip grafting. Graft inoculated sweet orange, 27 to 32°C. Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot temperature (> 30°C) and incubate cultures at 32°C.
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xylella fastidiosa</i>	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
<i>Xylella fastidiosa</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus indicator.
Virus	
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures temperatures 18 to 25°C.
citrus infectious variegation ilarvirus	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus infectious variegation ilarvirus [crinkly leaf strain]	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus leaf rugose ilarvirus	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
citrus leathery leaf virus	Country freedom OR Rangpur lime. Grow indicators at cool temperatures 18 to 25°C.
citrus leprosis rhabdovirus	Country freedom OR graft inoculated sweet orange. Grow indicators at cool temperatures 18 to 25°C.
citrus mosaic virus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
citrus ringspot virus	Country freedom OR graft inoculated dweet tangor, sweet orange, mandarin (Parson's Special). Grow indicators at cool temperatures 18 to 25°C.
citrus tatter leaf capillovirus	Country freedom OR graft inoculated Rusk citrange, rough lemon, <i>Citrus excelsa</i> , citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza closterovirus [strains not in New Zealand]	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
citrus yellow mosaic badnavirus	Country freedom OR graft inoculated sweet orange, sour orange and citron.
citrus yellow mottle virus	Country freedom OR other suitable test.
Indian citrus mosaic badnavirus	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.
navel orange infectious mottling virus	Country freedom OR graft inoculated Satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.

ORGANISM TYPES	MAF ACCEPTABLE METHODS
satsuma dwarf nepovirus [Natsudaikai dwarf strain]	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
yellow vein clearing of lemon	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
Viroid	
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus viroids (groups I-IV)	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or mandarin (Parson's Special). Grow Citron at hot temperature 27 to 32°C.
Disease of unknown aetiology	
Australian citrus dieback	Country freedom OR other suitable test
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
bud union disease	Country freedom OR other suitable test
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years before releasing from quarantine.
citrus fatal yellows	Country freedom OR graft inoculated <i>Citrus macrophylla</i> .
citrus impietratura disease	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth indicators at cool temperatures 18 to 25°C.
citrus sunken vein disease	Country freedom OR other suitable test.
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
crisacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
kassala disease	Country freedom, cuttings collected from kassala free area.
lemon sieve tube necrosis	Country freedom OR other suitable test.
shell bark of lemons	Country freedom OR other suitable test.
zonate chlorosis	Country freedom, cuttings collected from kassala free area.
Phytoplasma	
<i>Candidatus</i> phytoplasma aurantifolia	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18 to 25°C.
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot temperature 27 to 32°C.

* Country freedom is accepted as equivalence to a treatment.

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. With prior notification, MAF will accept other internationally recognised testing methods.

Clivia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Clivia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Virus diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Convallaria

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Convallaria*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Pratylenchus convallariae*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"*Pratylenchus convallariae* is not known to occur in _____ (the country or state where the plants were grown) _____".

Corylus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Corylus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Anisogramma anomala*; *Monilinia fructigena*; *Xanthomonas campestris* pv. *corylina*; *Phytophthora ramorum*

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

For Whole Plants and Tissue Culture:

PEQ: Level 3

Minimum Period: 3 months

Cotoneaster

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Cotoneaster*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Gymnosporangium* spp.; *Xylella fastidiosa*

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from All Countries except Argentina, Belize, the Caribbean Islands, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States of America, Venezuela and Yugoslavia:

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "*Gymnosporangium* spp. are not known to occur on _____ (name of plant species) _____ in _____(the country or state where the plants were produced) _____".

OR

"The plants were from a crop inspected during the growing season and no rust diseases were detected".

2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export".

3. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Plants in Tissue Culture from All Countries:

As for **Standard Entry Conditions for Tissue cultures** - see Section 2.2.2.

Crataegus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Crataegus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Gymnosporangium clavipes*, *Gymnosporangium globosum*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

Option 1

PEQ: Level 2
Minimum Period: 6 months

Additional Declarations:

1. "*Gymnosporangium clavipes* and *Gymnosporangium globosum* are not known to occur on _____(host species being imported) _____ in _____ (the country or state in which the plants were grown) _____".
2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export".

OPTION 2:

PEQ: Level 3
Minimum Period: 3 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Crocoshmia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Frankliniella occidentalis*; virus diseases

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Crocus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Crocus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Frankliniella occidentalis*; virus diseases

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

1) For bulbs produced under a MAF-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 or ALG [choose one] bulb certification scheme."

OR

2) For bulbs NOT produced under a MAF-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Cyas*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All except Australia, Cayman Islands, China, Guam, Italy, Puerto Rico, Singapore, Taiwan, Thailand, U.S. Virgin Islands and the USA (Florida and Hawaii).

Quarantine Pests: *Aulacaspis yasumatsui*, *Demyrsus meleoides*.

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings (dormant), including offsets in the form of dormant buds divided from the trunk:

PEQ: Level 2

Minimum Period: 6 months

Inspection Requirements: A minimum of 600 plants are to be inspected during each inspection in post-entry quarantine

Additional Declaration:

"The nursery stock has been sourced from a “Pest free area”, free from *Aulacaspis yasumatsui*"

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Dahlia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dahlia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Phymatotrichopsis omnivora*; *Tetranychus kanzawai*; Uredinales

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "Rust diseases are not known to occur on *Dahlia* in _ (the country in which the plants were grown) _".
2. "The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre of water".

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

1) For bulbs produced under a MAF-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 or ALG [choose one] bulb certification scheme."

OR

2) For bulbs NOT produced under a MAF-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from the USA:

No import permit is required unless the bulbs require post-entry quarantine.

PEQ: None or Level 2 (see below)

Additional Declaration(s):

1. "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate

procedures, and considered free of quarantine pests, and practically free from other injurious pests".

2. "The dormant tubers have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a "Pest free place of production", free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

D. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

PEQ: Level 1 or Level 2 (see below)

Minimum Period: 3 months

Additional Declaration(s):

1. "The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

2. "The dormant tubers have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a "Pest free place of production", free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

E. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Delphinium

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Delphinium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, USA.

Quarantine Pests: Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on _____(the host species being imported)_____ in _____ (the country in which the plants were grown) _____".

B. For Tissue Cultures:

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

Dianthus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dianthus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Frankliniella occidentalis*, *Liriomyza* spp., Uredinales

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

1. "The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."
2. "The plants were inspected during the growing season and no rust diseases were found"

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Dianthus caryophyllus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dianthus caryophyllus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Frankliniella occidentalis*, *Liriomyza* spp.

Entry Conditions: **Basic;** with variations and additional conditions as specified below.

A. For Whole Plants:

OPTION 1:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

OPTION 2: (For Netherlands only)

PEQ: Level 2

Minimum Period: 4 weeks

Additional Declarations:

1. "The imported plants meet the requirements of the NAKtuinbouw Elite (Class SEE or EE) [choose one] certification scheme."
2. "The plants have been held at $1.5^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ for 2 days, then fumigated with methyl bromide at $14\text{g}/\text{m}^3$ for 4 hours at 15°C and packed so that re-infestation with insects cannot occur."

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Dioscorea

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dioscorea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Phymatotrichopsis omnivora*; Virus diseases

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from the USA:

No import permit is required unless the bulbs require post-entry quarantine.

PEQ: None or Level 2 (see below)

Additional Declaration(s):

1. "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests".

2. "The dormant tubers have been sourced from a “Pest free area”, free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a “Pest free place of production”, free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been

undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

D. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

PEQ: Level 1 or Level 2 (see below)

Minimum Period: 3 months

Additional Declaration(s):

1. "The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

2. "The dormant tubers have been sourced from a “Pest free area”, free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a “Pest free place of production”, free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

E. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Diospyros

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Diospyros*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Cephalosporium diospyri*; *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants and Tissue Culture:

PEQ: Level 3

Minimum Period: 3 months

Dracaena

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dracaena*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Chrysomphalus aonidum* and *Xyleborus* spp. (except *Xyleborus compressus*, *Xyleborus truncatus* and *Xyleborus saxeseni*)

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Inspection Requirements: A minimum of 600 plants are to be inspected during each inspection in post-entry quarantine

Additional declarations:

"The *Dracaena* cuttings / plants [choose one] in this consignment have been:

- sourced from a “Pest free area” or “Pest free place of production” [choose one], free from *Xyleborus* spp. (except *Xyleborus compressus*, *Xyleborus truncatus* and *Xyleborus saxeseni*).

AND

- sourced from a “Pest free area” or “Pest free place of production” [choose one], free from *Chrysomphalus aonidum*.
- or
- inspected in accordance with appropriate official procedures and found to be free of *Chrysomphalus aonidum*."

Treatments:

Cuttings (dormant) must be treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions. All other material (whole plants and non-dormant cuttings) must be treated for regulated insects and mites using methyl bromide fumigation as described in section 2.2.1.6 of the basic conditions (methyl bromide may be damaging to some *Dracaena* species and is carried out at the importer’s risk).

B. For Plants in Tissue Culture:

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

Eriobotrya

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eriobotrya*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Pseudomonas syringae* pv. *eriobotryae*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2
Minimum Period: 6 months

Additional Declaration:

"*Pseudomonas syringae* pv. *eriobotryae* is not known to occur in _____ (the country or state where the plants were grown) _____".

OR

"The plants were from a nursery that has been inspected for the presence of *Pseudomonas syringae* pv. *eriobotryae* and none has been detected".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Eucalyptus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eucalyptus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Puccinia psidii*; *Endothia havanensis*; *Mycosphaerella parva*.

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3
Minimum Period: 6 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Eugenia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eugenia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Luxembourg, Norway, The Netherlands, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Quarantine Pests: *Puccinia psidii*; *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration(s):

1. "*Puccinia psidii* is not known to occur in _____ (the country or state of origin) _____".
2. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Eupatorium

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eupatorium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom.

Quarantine Pests: Uredinales; *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration(s):

1. "Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on _____(the host species being imported)_____ in _____ (the country in which the plants were grown) _____".
2. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Tissue Cultures:

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

Eutrema

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eutrema*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Japan

Quarantine Pests: *Ascochyta brassicae*; *Athalia* spp.; *Eurydema* spp.; *Peronospora alliariae*; *Septoria wasabiae*

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Nursery Stock excluding Tissue Cultures:

PEQ: Level 2
Minimum Period: 3 months

Additional Declaration:

"Plants have been dipped in captan at the rate of 1.25g a.i. per litre of water within 1 week of export".

Special Condition:

On arrival in New Zealand the plants are to be treated, under the supervision of an Inspector, at a MAF-registered transitional facility by dipping in metalaxyl or furalaxyl at the rate of 1.2g a.i. per litre of water.

B. For Tissue cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Fagus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fagus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Cronartium quercuum*; *Phytophthora ramorum*; Tortricidae

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Cuttings (dormant) and Whole Plants (dormant) from:

a) Canada:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration(s):

1. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water."
2. "The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum*".

OR

PEQ: Level 3

Minimum Period: 6 months

b) Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA:

PEQ: Level 3

Minimum Period: 6 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Fagus sylvatica

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fagus sylvatica*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Cronartium quercuum*; *Cryphonectria parasitica*; *Phytophthora ramorum*; Tortricidae

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Cuttings (dormant) and Whole Plants (dormant) from:

a) Canada:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration(s):

1. "*Cryphonectria parasitica* is not known to occur in _____ (the country or state where the plants/cuttings) were grown _____".

OR (for cuttings only)

"The tree(s), from which this material was taken, was inspected during the previous growing season and no *Cryphonectria parasitica* was detected".

OR (for young plants)

"The plants were inspected during the previous growing season and no *Cryphonectria parasitica* was detected".

2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water."

3. "The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum*".

OR

PEQ: Level 3

Minimum Period: 6 months

b) Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA:

PEQ: Level 3

Minimum Period: 6 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Ficus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Ficus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Uredo ficina*

Entry Conditions: Basic; with variations and additional conditions as specified below:

For Whole Plants and Tissue Culture:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"*Uredo ficina* is not known to occur in _____ (the country or state where the plants were grown) _____".

Note: Nursery stock of *Ficus microcarpa* must be free of flowers and fruit.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fortunella*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Fortunella* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

2. Pests of *Fortunella*

Refer to the pest list.

3. Entry conditions for:

3.1 *Fortunella* cuttings from offshore MAF-accredited facilities (quarantine stations)

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Fortunella*, the accredited facility operator must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Fortunella*.

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Fortunella* cuttings exported to New Zealand.

(ii) Inspection, Testing and Treatments of the consignment

The inspection, testing and treatment requirements for specified regulated pests must be undertaken at the accredited facility as specified in the agreement between MAF and the accredited facility operator. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Fortunella* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

AND

- sourced from either mother plants that have been kept in insect proof plant houses or from open ground mother plants

AND

- held and tested for/classified free from specified regulated pests at a MAF-accredited facility

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country

NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Fortunella* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with New Zealand's current phytosanitary requirements.

AND

- sourced from mother plants that have been kept in insect proof plant houses/sourced from open ground mother plants [choose one].

AND

- held and tested for/classified free from specified regulated pests at the accredited facility as required in the agreement between MAF and the accredited facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

(v) Post-entry quarantine

PEQ: Level 2

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pathogens. Indicative minimum quarantine periods are: 6 months for *Fortunella* cuttings sourced from mother plants that have been kept in insect proof plant houses, or 16 months for *Fortunella* cuttings sourced directly from open ground mother plants. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Fortunella* cuttings from non-accredited facilities in any country

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Fortunella* cuttings exported to New Zealand.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Fortunella* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Fortunella* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with

the current phytosanitary requirements of MAF."

(iv) Inspection, Testing and Treatments of the consignment

Following inspection at the border, upon arrival, the *Fortunella* cuttings will be directed to a facility accredited to the MAF standard BMG-STD-TREAT: *Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export*, to be sprayed/dipped in MAF-approved miticide and insecticides as described in section 2.2.1.6 of the basic conditions.

Following treatment, testing for specified regulated pests must be undertaken at a New Zealand Level 3 MAF-accredited facility. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(v) Post-entry quarantine

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pathogens. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

3.3 *Fortunella* plants in tissue culture from offshore MAF-accredited facilities

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Fortunella*, the accredited facility operator must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Fortunella*.

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Fortunella* tissue culture exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Inspection, Testing and Treatments of the consignment

The inspection, treatment and testing requirements for specified pests must be undertaken at the accredited facility as specified in the arrangement between MAF and the accredited facility operator. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(iv) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Fortunella* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

AND

- held and tested for/classified free from specified regulated pests at a MAF-accredited facility and,

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

(v) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Fortunella* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with New Zealand's current phytosanitary requirements.

AND

- held and tested for/classified free from specified regulated pests at the accredited facility as specified in the agreement between MAF and the accredited facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

(vi) Post-entry quarantine

PEQ: Level 2

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

3.4 *Fortunella* plants in tissue culture from non-accredited facilities in any country

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Fortunella* nursery stock exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Fortunella* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Fortunella* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with the current phytosanitary requirements of MAF."

(v) Inspection, Testing and Treatments of the consignment

Upon arrival, the inspection, treatment and testing requirements for specified pests must be undertaken at a New Zealand Level 3 MAF-accredited facility. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(vi) Post-entry quarantine

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and or indexing to detect regulated pests. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected or treatments required.

Pest List for *Fortunella*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Bostrichidae

Apate indistincta

shot-hole borer

Apate terebrans

shot-hole borer

Buprestidae

Agrilus alesi

flatheaded citrus borer

Agrilus auriventris

citrus flatheaded borer

Cerambycidae

Anoplophora malasiaca

white-spotted longicorn beetle

Chelidonium gibbicolle

-

Dihammus vastator

fig longhorn

Melanauster chinensis

-

Paradisterna plumifera

speckled longicorn

Promeces linearis

-

Skeletodes tetrops

longhorn beetle

Strongylurus thoracicus

pittosporum longicorn

Uracanthus cryptophagus

citrus branch borer

Chrysomelidae

Colasposoma fulgidum

bluegreen citrus nibbler

Colasposoma scutellare

-

Geloptera porosa

pitted apple beetle

Luperomorpha funesta

mulberry flea beetle

Monolepta australis

red-shouldered leaf beetle

Sebaethe fulvipennis

flea beetle

Coccinellidae

Cheilomenes lunata [Animals Biosecurity]

-

Chilocorus cacti [Animals Biosecurity]

-

Chilocorus distigma [Animals Biosecurity]

-

Chilocorus nigrita [Animals Biosecurity]

-

Exochomus flavipes [Animals Biosecurity]

-

Pentilia castanea [Animals Biosecurity]

-

Rhyzobius lophanthae [Animals Biosecurity]

-

Scymnus nanus [Animals Biosecurity]

-

Serangium parcesetosum [Animals Biosecurity]

-

Stethorus aethiops [Animals Biosecurity]

-

Stethorus histrio [Animals Biosecurity]

-

Stethorus punctata picipes [Animals Biosecurity]

-

Curculionidae

Amystax fasciatus [Animals Biosecurity]

-

Artipus sp.

-

Brachycerus citriperda

-

Callirhopalus bifasciatus

two-banded Japanese weevil

Dereodus recticollis

-

Diaprepes abbreviatus

citrus weevil

Diaprepes spp.

-

Eutinophaea bicristata

citrus leaf-eating weevil

Leptopius squalidus

fruit tree root weevil

Naupactus xanthographus

fruit tree weevil

Otiorhynchus cribricollis

cribrate weevil

Pachnaeus citri

-

Pachnaeus litus

citrus root weevil

Perperus lateralis

white-striped weevil

Prepodes spp.

-

<i>Protostrophus avidus</i>	weevil
<i>Sciobius marshalli</i>	citrus snout beetle
<i>Sympiezomias lewisi</i>	-
Lucanidae	
<i>Prosopocoilus spencei</i>	-
Scarabaeidae	
<i>Hypopholis indistincta</i>	scarab beetle
<i>Maladera matrida</i>	scarab beetle
Scolytidae	
<i>Salagena</i> sp.	-
<i>Xylosandrus germanus</i>	alnus ambrosia beetle
Diptera	
Cecidomyiidae	
<i>Contarinia citri</i>	leafcurling midge
<i>Contarinia okadai</i>	citrus flower gall midge
<i>Trisopsis</i> sp.	-
Chamaemyiidae	
<i>Leucopis alticeps</i> [Animals Biosecurity]	-
Drosophilidae	
<i>Drosophila paulistorum</i>	-
<i>Drosophila pseudoobscura</i>	-
<i>Drosophila simulans</i>	-
<i>Drosophila willistoni</i>	-
Tephritidae	
<i>Dirioxa pornia</i>	island fruit fly
Hemiptera	
Anthocoridae	
<i>Orius thripoborus</i> [Animals Biosecurity]	-
<i>Thripleps thripoborus</i> [Animals Biosecurity]	-
Coreidae	
<i>Acanthocoris striicornis</i>	larger squash bug
<i>Anoplocnemis curvipes</i>	coreid bug
<i>Leptoglossus membranaceus</i>	coreid bug
<i>Mictis profana</i>	crusader bug
<i>Paradasynus spinosus</i>	squash bug
<i>Veneza phyllopus</i>	leaf-footed bug
Lygaeidae	
<i>Nysius vinitor</i>	Rutherglen bug
Miridae	
<i>Austropeplus</i> sp.	citrus blossom bug
Pentatomidae	
<i>Antestia variegata</i>	antestia bug
<i>Antestiopsis orbitalis</i>	-
<i>Antestiopsis variegata</i>	antestia bug
<i>Biprorulus bibax</i>	spined citrus bug
<i>Glaucias subpunctatus</i>	polished green stink bug
<i>Halyomorpha mista</i>	brown-marmorated stink bug
<i>Musgraveia sulciventris</i>	bronze orange bug
<i>Plautia stali</i>	oriental stink bug
<i>Rhynchocoris humeralis</i>	pentatomid bug
Unknown Hemiptera	
<i>Holopterna vulga</i>	bug
Homoptera	
Aleyrodidae	
<i>Aleurocanthus citripertus</i>	whitefly
<i>Aleurocanthus spiniferus</i>	orange spiny whitefly
<i>Aleurocanthus</i> spp.	whiteflies
<i>Aleurocanthus woglumi</i>	citrus blackfly
<i>Aleurodicus dispersus</i>	spiralling whitefly
<i>Aleurolobus marlatti</i>	Marlatt whitefly

<i>Aleuroplatus</i> sp.	whitefly
<i>Aleurothrixus floccosus</i>	woolly whitefly
<i>Aleurotuba jelinekii</i>	-
<i>Aleurotuberculatus aucubae</i>	aucuba whitefly
<i>Bemisia citricola</i>	-
<i>Dialeurodes citri</i>	citrus whitefly
<i>Dialeurodes citrifolii</i>	cloudywinged whitefly
<i>Dialeuroloa</i> sp.	-
<i>Parabemisia myricae</i>	Japanese bayberry whitefly
<i>Siphoninus phillyreae</i>	phillyrea whitefly
Aphididae	
<i>Aphis fabae</i>	bean aphid
<i>Aulacorthum magnoliae</i>	Japanese elder aphid
Cicadellidae	
<i>Asymmetrasca decedens</i>	leafhopper
<i>Circulifer opacipennis</i>	-
<i>Circulifer tenellus</i>	beet leafhopper
<i>Cuerna costalis</i>	leafhopper
<i>Edwardsiana flavescens</i>	leafhopper
<i>Empoasca bodenheimeri</i>	-
<i>Empoasca citrura</i>	green citrus leafhopper
<i>Empoasca decipiens</i>	green leafhopper
<i>Empoasca distinguenda</i>	-
<i>Empoasca fabae</i>	potato leafhopper
<i>Empoasca onukii</i>	tea green leafhopper
<i>Homalodisca coagulata</i>	glassy-winged sharpshooter
<i>Homalodisca lacerta</i>	-
<i>Jacobiasca lybica</i>	cotton jassid
<i>Neoaliturus haematoceps</i>	leafhopper
<i>Penthimiola bella</i>	citrus leafhopper
<i>Scaphytopius nitridus</i>	leafhopper
Cicadidae	
<i>Cryptotympana facialis</i>	black cicada
<i>Meimuna opalifera</i>	elongate cicada
Coccidae	
<i>Ceroplastes floridensis</i>	Florida wax scale
<i>Ceroplastes japonicus</i>	pink wax scale
<i>Ceroplastes rubens</i>	red wax scale
<i>Ceroplastes rusci</i>	fig wax scale
<i>Coccus celatus</i>	-
<i>Coccus pseudomagnoliarum</i>	citricola scale
<i>Coccus viridis</i>	green scale
<i>Cribrolecanium andersoni</i>	white powdery scale
<i>Gascardia brevicauda</i>	white waxy scale
<i>Protospulvinaria pyriformis</i>	pyriform scale
<i>Pulvinaria aethiopica</i>	soft green scale
<i>Pulvinaria aurantii</i>	citrus cottony scale
<i>Pulvinaria cellulosa</i>	pulvinaria scale
<i>Saissetia citricola</i>	citrus string cottony scale
<i>Saissetia somereni</i>	-
Dactylopiidae	
<i>Dactylopius filamentosis</i>	-
<i>Dactylopius vastator</i>	-
Diaspididae	
<i>Aonidiella citrina</i>	yellow scale
<i>Chrysomphalus aonidium</i>	Florida red scale
<i>Chrysomphalus bifasciculatus</i>	brown scale
<i>Chrysomphalus dictyospermi</i>	dictyospermum scale
<i>Chrysomphalus pinnulifera</i>	false purple scale
<i>Ischnaspis longirostris</i>	black thread scale

<i>Lepidosaphes beckii</i>	purple scale
<i>Lepidosaphes gloverii</i>	Glover scale
<i>Parlatoria ziziphi</i>	black parlatoria scale
<i>Pseudaonidia duplex</i>	camphor scale
<i>Selenaspidus articulatus</i>	West Indian red scale
<i>Unaspis citri</i>	citrus snow scale
<i>Unaspis yanonensis</i>	Japanese citrus scale
Flatidae	
<i>Colgar peracuta</i>	-
<i>Geisha distinctissima</i>	green broad-winged planthopper
<i>Lawana conspersa</i>	green flatid planthopper
<i>Metcalfa pruinosa</i>	planthopper
Fulgoridae	
<i>Anzora unicolor</i>	-
Margarodidae	
<i>Drosicha howardi</i>	persimmon mealybug
<i>Icerya seychellarum</i>	Seychelles scale
Ortheziidae	
<i>Nipponorthezia ardisiae</i>	ensign scale
Pseudococcidae	
<i>Allococcus</i> spp.	-
<i>Ferrisia consobrina</i>	mealybug
<i>Ferrisia virgata</i>	striped mealybug
<i>Nipaecoccus vastator</i>	nipa mealybug
<i>Nipaecoccus viridis</i>	hibiscus mealybug
<i>Paracoccus burnerae</i>	spherical mealybug
<i>Planococcus kraunhiae</i>	Japanese wisteria mealybug
<i>Planococcus lilacinus</i>	citrus mealybug
<i>Planococcus minor</i>	passionvine mealybug
<i>Pseudococcus citriculus</i>	smaller citrus mealybug
<i>Pseudococcus commonus</i>	-
<i>Pseudococcus filamentosus</i>	mealybug
<i>Rastrococcus spinosus</i>	mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
Psyllidae	
<i>Diaphorina citri</i>	citrus psyllid
<i>Trioza erytrae</i> [vector]	citrus psyllid
Ricaniidae	
<i>Scolytopa</i> sp.	-
Tropiduchidae	
<i>Tambinia</i> sp.	-
Hymenoptera	
Aphelinidae	
<i>Aphytis africanus</i> [Animals Biosecurity]	-
<i>Aphytis holoxanthus</i> [Animals Biosecurity]	-
<i>Aphytis lepidosaphes</i> [Animals Biosecurity]	-
<i>Aphytis lingnanensis</i> [Animals Biosecurity]	-
<i>Aphytis melinus</i> [Animals Biosecurity]	-
<i>Azotus platensis</i> [Animals Biosecurity]	-
<i>Cales noacki</i> [Animals Biosecurity]	-
<i>Cales orchamoplati</i> [Animals Biosecurity]	-
<i>Centrodora penthymiae</i> [Animals Biosecurity]	-
<i>Coccophagus caridei</i> [Animals Biosecurity]	-
<i>Coccophagus pulvinariae</i> [Animals Biosecurity]	-
<i>Encarsia ectopaga</i> [Animals Biosecurity]	-
<i>Encarsia lahorensis</i> [Animals Biosecurity]	-
<i>Encarsia lounsburyi</i> [Animals Biosecurity]	-
<i>Encarsia opulenta</i> [Animals Biosecurity]	-
<i>Encarsia smithi</i> [Animals Biosecurity]	-
<i>Eretmocerus serius</i> [Animals Biosecurity]	-

<i>Marietta connecta</i> [Animals Biosecurity]	-
<i>Marietta leopardina</i> [Animals Biosecurity]	-
Braconidae	
<i>Apanteles aristotalilae</i> [Animals Biosecurity]	-
<i>Biosteres longicaudatus</i> [Animals Biosecurity]	-
<i>Pholetesor ornigis</i> [Animals Biosecurity]	-
Encyrtidae	
<i>Anicetus beneficus</i> [Animals Biosecurity]	-
<i>Comperiella bifasciata</i> [Animals Biosecurity]	-
<i>Habrolepis rouxi</i> [Animals Biosecurity]	-
<i>Leptomastix dactylopii</i> [Animals Biosecurity]	parasitic wasp
<i>Metaphycus helvolus</i> [Animals Biosecurity]	-
<i>Metaphycus luteolus</i> [Animals Biosecurity]	-
<i>Metaphycus stanleyi</i> [Animals Biosecurity]	-
<i>Metaphycus varius</i> [Animals Biosecurity]	-
<i>Psyllaephagus pulvinatus</i> [Animals Biosecurity]	-
Eulophidae	
<i>Aprostocetus ceroplastae</i> [Animals Biosecurity]	-
<i>Elachertus fenestratus</i> [Animals Biosecurity]	-
<i>Tamarixia radiatus</i> [Animals Biosecurity]	-
Eupelmidae	
<i>Anastatus biproruli</i> [Animals Biosecurity]	-
Eurytomidae	
<i>Bruchophagus fellis</i>	citrus gall midge
Formicidae	
<i>Acromyrmex octospinosus</i>	leaf-cutting ant
<i>Anoplolepis braunsi</i> [Animals Biosecurity]	-
<i>Anoplolepis custodiens</i>	ant
<i>Anoplolepis steingroeveri</i> [Animals Biosecurity]	black ant
<i>Atta cephalotes</i>	leaf-cutting ant
<i>Atta sexdens</i>	-
<i>Atta texana</i>	Texas leaf-cutting ant
<i>Camponotus rufoglaucus</i>	-
<i>Crematogaster castanea</i>	-
<i>Crematogaster liengmei</i>	-
<i>Crematogaster peringueyi</i> [Animals Biosecurity]	cocktail ant
<i>Lepisiota capensis</i> [Animals Biosecurity]	-
<i>Myrmecaria natalensis</i>	-
<i>Pheidole tenuinodis</i>	ant
<i>Polyrhachis schistaceus</i>	ant
<i>Solenopsis invicta</i> [Animals Biosecurity]	red imported fire ant
<i>Tapinoma arnoldi</i>	-
<i>Technomyrmex albipes foreli</i> [Animals Biosecurity]	-
Mymaridae	
<i>Chaetomyrmex gracile</i> [Animals Biosecurity]	-
<i>Chaetomyrmex lepidum</i> [Animals Biosecurity]	-
<i>Gonatocerus incomptus</i> [Animals Biosecurity]	-
Platygasteridae	
<i>Amitus hesperidum</i> [Animals Biosecurity]	-
<i>Amitus spiniferus</i> [Animals Biosecurity]	-
<i>Fidiobia citri</i> [Animals Biosecurity]	-
Scelionidae	
<i>Trissolcus oeneus</i> [Animals Biosecurity]	-
<i>Trissolcus oenone</i> [Animals Biosecurity]	-
<i>Trissolcus ogyges</i> [Animals Biosecurity]	-
Signiphoridae	
<i>Signiphora fax</i> [Animals Biosecurity]	-
<i>Signiphora flavella</i> [Animals Biosecurity]	-
<i>Signiphora perpauca</i> [Animals Biosecurity]	-
Trichogrammatidae	

<i>Trichogramma platneri</i> [Animals Biosecurity]	-
Vespidae	
<i>Polistes</i> spp. [Animals Biosecurity]	paper wasps
Isoptera	
Termitidae	
<i>Odontotermes lokanandi</i>	termite
Lepidoptera	
Arctiidae	
<i>Lemyra imparilis</i>	mulberry tiger moth
Blastobasidae	
<i>Holcocera iceryaeella</i>	-
Cosmopterigidae	
<i>Pyroderces rileyi</i>	pink scavenger caterpillar
Geometridae	
<i>Anacamptodes fragilaria</i>	koa haole looper
<i>Ascotis selenaria reciprocaria</i>	citrus looper
<i>Gymnoscelis ruffasciata</i>	geometrid moth
<i>Hyposidra talaca</i>	-
Gracillariidae	
<i>Phyllocnistis citrella</i>	citrus leafminer
Hepialidae	
<i>Endoclita excrescens</i>	Japanese swift moth
<i>Endoclita sinensis</i>	-
Lycaenidae	
<i>Virachola isocrates</i>	pomegranate butterfly
Lymantriidae	
<i>Orgyia vetusta</i>	western tussock moth
Metarbelidae	
<i>Indarbela tetraonis</i>	stem borer
Noctuidae	
<i>Arcte coerulea</i>	fruit-piercing moth
<i>Eudocima fullonia</i>	fruit-piercing moth
<i>Helicoverpa assulta</i>	cape gooseberry budworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Tiracola plagiata</i>	banana fruit caterpillar
<i>Xylomyges curialis</i>	noctuid moth
Nymphalidae	
<i>Charaxes jasius</i>	nymphalid butterfly
Oecophoridae	
<i>Psorosticha melanocrepida</i>	citrus leafroller
<i>Psorosticha zizyphi</i>	citrus leafroller
<i>Stathmopoda auriferella</i>	apple heliodinid
Papilionidae	
<i>Papilio aegeus aegeus</i>	-
<i>Papilio anactus</i>	small citrus butterfly
<i>Papilio crespontes</i>	orange dog
<i>Papilio dardanus cenea</i>	-
<i>Papilio demodocus</i>	orange dog
<i>Papilio demoleus demoleus</i>	-
<i>Papilio helenus nicconicolens</i>	-
<i>Papilio machaon asiatica</i>	-
<i>Papilio memnon</i>	citrus swallowtail
<i>Papilio memnon thunbergii</i>	-
<i>Papilio nireus lyaeus</i>	-
<i>Papilio polytes polytes</i>	-
<i>Papilio protenor demetrius</i>	-
<i>Papilio xuthus</i>	citrus swallowtail
<i>Papilio zelicaon</i>	anise swallowtail
Psychidae	
<i>Eumeta hardenbergi</i>	-

<i>Eumeta japonica</i>	-
<i>Eumeta minuscula</i>	tea bagworm
<i>Eumeta moddermanni</i>	-
<i>Hyalarcta huebneri</i>	leaf case moth
Pyralidae	
<i>Apomyelois ceratoniae</i>	date pyralid
Tortricidae	
<i>Adoxophyes</i> sp.	-
<i>Amorbia cuneana</i>	leafroller
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Archips machlopiis</i>	leafroller
<i>Archips occidentalis</i>	leafroller
<i>Archips rosanus</i>	rose leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Cryptophlebia batrachopa</i>	-
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Homona magnanima</i>	oriental tea tortrix
<i>Isotenes miserana</i>	orange fruitborer
<i>Platynota stultana</i>	omnivorous leafroller
<i>Tortrix capensana</i>	tortricid moth
Yponomeutidae	
<i>Prays citri</i>	citrus flower moth
<i>Prays parilis</i>	citrus flower moth
Neuroptera	
Chrysopidae	
<i>Chrysopa oculata</i> [Animals Biosecurity]	-
Coniopterygidae	
<i>Coniopteryx vicina</i> [Animals Biosecurity]	-
<i>Conwentzia barretti</i> [Animals Biosecurity]	-
Orthoptera	
Acrididae	
<i>Zonocerus elegans</i>	elegant grasshopper
Gryllidae	
<i>Ornebius kanetataki</i>	cricket
Tettigoniidae	
<i>Caedicia</i> sp.	-
<i>Holochlora japonica</i>	Japanese broadwinged katydid
<i>Microcentrum retinerve</i>	smaller angular-winged katydid
<i>Scudderia furcata</i>	fork-tailed bush katydid
Psocoptera	
Archipsocidae	
<i>Archipsocus</i> sp.	bark louse
Thysanoptera	
Aeolothripidae	
<i>Franklinothrips vespiformis</i> [Animals Biosecurity]	-
Thripidae	
<i>Chaetanaphothrips orchidii</i>	banana rust thrips
<i>Leptothrips mali</i>	black hunter thrips
<i>Scirtothrips aurantii</i>	citrus thrips
<i>Scirtothrips citri</i>	citrus thrips
<i>Scirtothrips dorsalis</i>	chilli thrips
<i>Scirtothrips mangiferae</i>	mango thrips
<i>Scolothrips sexmaculatus</i> [Animals Biosecurity]	-
<i>Taeniothrips kellyanus</i>	-
<i>Taeniothrips</i> sp.	-
<i>Thrips coloratus</i>	thrips
<i>Thrips flavus</i>	flower thrips
<i>Thrips palmi</i>	palm thrips
Unknown Insecta	

Unknown Insecta

Cosmophyllum pallidulum -

Mite

Arachnida

Acarina

Acaridae

Thyreophagus entomophagus italicus [Animals Biosecurity] -

Anystidae

Anystis agilis [Animals Biosecurity] -

Eriophyidae

Aculops pelekassi eriophyid mite
Tegolophus australis brown citrus mite

Phytoseiidae

Amblyseius addoensis [Animals Biosecurity] -
Amblyseius citri [Animals Biosecurity] -
Amblyseius swirskii [Animals Biosecurity] -
Euseius hibisci [Animals Biosecurity] -
Euseius scutalis [Animals Biosecurity] -
Euseius stipulatus [Animals Biosecurity] -
Euseius tularensis [Animals Biosecurity] -
Iphiseius degenerans [Animals Biosecurity] predatory mite
Typhlodromus athiasae [Animals Biosecurity] -

Stigmaeidae

Agistemus africanus [Animals Biosecurity] -
Agistemus tranatalensis [Animals Biosecurity] -
Eryngiopus siculus [Animals Biosecurity] -

Tarsonemidae

Tarsonemus cryptocephalus [Animals Biosecurity] -

Tenuipalpidae

Brevipalpus chilensis false spider mite
Brevipalpus lewisi bunch mite
Brevipalpus obovatus privet mite
Tenuipalpus emeticae [Animals Biosecurity] -
Tuckerella ornata -
Ultratenuipalpus gonianaensis tenuipalpid mite

Tetranychidae

Calacarus citrifolii clover mite
Eotetranychus kankitus tetranychid mite
Eotetranychus lewisi big beaked plum mite
Eotetranychus yumensis Yumi spider mite
Eutetranychus africanus tetranychid mite
Eutetranychus banksi Texas citrus mite
Eutetranychus orientalis pear leaf blister mite
Oligonychus mangiferus mango spider mite
Tetranychus kanzawai kanzawa mite

Tuckerellidae

Tuckerella knorri hawthorn spider mite

Spider

Arachnida

Araneae

Clubionidae

Cheiracanthium mildei [Animals Biosecurity] -

Theridiidae

Theridion sp. [Animals Biosecurity] -

Mollusc

Gastropoda

Stylommatophora

Achatinidae	
<i>Achatina immaculata</i>	-
<i>Lissachatina immaculata</i>	snail
Bradybaenidae	
<i>Acusta despecta sieboldiana</i>	snail
Subulinidae	
<i>Rumina decollata</i>	snail
Urocyclidae	
<i>Urocyclus flavescens</i>	-
<i>Urocyclus kirkii</i>	-
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
<i>Diaporthe rudis</i> (anamorph <i>Phomopsis rudis</i>)	phomopsis canker
Dothideales	
Elsinoaceae	
<i>Elsinoe australis</i>	sweet orange scab
Capnodiaceae	
<i>Capnodium citri</i>	sooty mould
Didymosphaeriaceae	
<i>Didymosphaeria</i> sp.	--
Mycosphaerellaceae	
<i>Guignardia citricarpa</i> (anamorph <i>Phyllosticta citricarpa</i>) [black spot strain]	citrus black spot
<i>Mycosphaerella citri</i> (anamorph <i>Stenella citri-grisea</i>)	rind blotch
<i>Mycosphaerella horii</i>	greasy spot
Patellariales	
Patellariaceae	
<i>Rhytidhysterium rufulum</i>	--
Saccharomycetales	
Saccharomycetaceae	
<i>Debaryomyces hansenii</i>	-
<i>Galactomyces citri-aurantii</i> (anamorph <i>Geotrichum citri-aurantii</i>)	sour rot
Basidiomycota: Basidiomycetes	
Boletales	
Coniophoraceae	
<i>Coniophora eremophila</i>	brown wood rot
Basidiomycota: Teliomycetes	
Septobasidiales	
Septobasidiaceae	
<i>Septobasidium pseudopedicellatum</i>	felt fungus
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
<i>Sphaceloma fawcettii</i> var. <i>scabiosa</i>	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophoma mantegazziana</i>	-
<i>Phoma erratica</i> var. <i>mikan</i>	--
<i>Phoma tracheiphila</i>	mal secco
<i>Phomopsis</i> sp.	rot
<i>Septoria</i> spp.	-
<i>Sphaeropsis tumefaciens</i>	stem gall
Unknown Coelomycetes	
Unknown Coelomycetes	
<i>Aschersonia placenta</i> [Animals Biosecurity]	--

<i>Gloeosporium foliicolum</i>	fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria limicola</i>	-
<i>Alternaria pellucida</i>	--
<i>Cercospora microsora</i>	-
<i>Phaeoramularia angolensis</i>	cercospora spot
<i>Stemphylium rosarium</i>	--
<i>Ulocladium obovoideum</i>	ulocladium rot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Aureobasidium</i> sp.	-
<i>Hirsutella thompsonii</i> [Animals Biosecurity]	--
<i>Isaria</i> sp. [Animals Biosecurity]	-
<i>Oidium tingitaninum</i>	powdery mildew
<i>Sporobolomyces roseus</i>	--
<i>Stenella</i> sp.	--
Zygomycota: Zygomycetes	
Glomales	
Glomaceae	
<i>Glomus etunicatum</i> [Animals Biosecurity]	--
Mucorales	
Syncephalastraceae	
<i>Syncephalastrum racemosum</i>	--
Bacterium	
Bacterium family unknown	
<i>Liberobacter africanum</i>	citrus greening bacterium
<i>Liberobacter asiaticum</i>	citrus greening bacterium
<i>Liberobacter</i> sp.	citrus greening bacterium
<i>Spiroplasma citri</i>	citrus stubborn
Pseudomonadaceae	
<i>Burkholderia cepacia</i>	sour skin
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	citrus canker
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	-
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	citrus bacterial spot
<i>Xylella fastidiosa</i>	Pierce's disease
<i>Xylella fastidiosa</i> pv. <i>citri</i>	variegated chlorosis of citrus
Virus	
Indian citrus mosaic badnavirus	-
citrus cachexia viroid	-
citrus chlorotic dwarf	-
citrus infectious variegation ilarvirus	-
citrus infectious variegation ilarvirus [crinkly leaf strain]	-
citrus leaf rugose ilarvirus	-
citrus leathery leaf virus	-
citrus leprosis rhabdovirus	-
citrus mosaic virus	-
citrus ringspot virus	-
citrus tatter leaf capillovirus	-
citrus tristeza closterovirus [strains not in New Zealand]	-
citrus variable viroid	-
citrus viroids (groups I-IV)	-
citrus yellow mosaic badnavirus	-
citrus yellow mottle virus	-
dwarfing factor viroid	-
navel orange infectious mottling virus	-
satsuma dwarf nepovirus	-

satsuma dwarf nepovirus [Natsudaikai dwarf strain]	-
xyloporosis viroid	-
yellow vein clearing of lemon	-

Phytoplasma

<i>Candidatus</i> Phytoplasma aurantifolia	witches' broom phytoplasma
rubbery wood	-

Disease of unknown aetiology

Australian citrus dieback	-
blind pocket	-
bud union disease	-
citrus blight disease	-
citrus fatal yellows	-
citrus impletatura disease	-
citrus sunken vein disease	-
concave gum	-
crisacortis	-
gum pocket	-
gummy bark	-
kassala disease	-
lemon sieve tube necrosis	-
shell bark of lemons	-
zonate chlorosis	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Anthribidae

Araecerus fasciculatus coffee bean weevil

Cerambycidae

Oemona hirta lemon tree borer

Coccinellidae

Cryptolaemus montrouzieri mealybug destroyer

Rodolia cardinalis [Animals Biosecurity]

Curculionidae

Asynonychus cervinus Fuller's rose weevil

Listroderes obliquus vegetable weevil

Maleuterpes spinipes dicky rice weevil

Phlyctinus callosus banded fruit weevil

Scarabaeidae

Costelytra zealandica grass grub

Diptera

Cryptochaetidae

Cryptochetum iceryae [Animals Biosecurity]

Drosophilidae

Drosophila melanogaster vinegar fly

Hemiptera

Pentatomidae

Nezara viridula green vegetable bug

Homoptera

Aleyrodidae

Orchamoplatus citri Australian citrus whitefly

Aphididae

Aphis craccivora cowpea aphid

Aphis gossypii cotton aphid

Aphis nerii oleander aphid

Aphis spiraeicola spirea aphid

Macrosiphum euphorbiae potato aphid

Myzus cerasi black cherry aphid

Myzus persicae green peach aphid

Toxoptera aurantii black citrus aphid

Toxoptera citricida brown citrus aphid

Coccidae

Ceroplastes ceriferus Indian white wax scale

Ceroplastes destructor white wax scale

Ceroplastes sinensis Chinese wax scale

Coccus hesperidum brown soft scale

Coccus longulus long brown scale

Saissetia coffeae hemispherical scale

Saissetia oleae black scale

Diaspididae

Aonidiella aurantii California red scale

Aspidiotus hederæ oleander scale

Aspidiotus nerii oleander scale

Diaspis santali scale

Lindingaspis rossi Ross' black scale

Lopholeucaspis japonica pear white scale

Parlatoria pergandii chaff scale

Pinnaaspis aspidistrae fern scale

Quadraspidiotus perniciosus San Jose scale

Flatidae	
<i>Siphanta acuta</i>	green planthopper
Margarodidae	
<i>Icerya purchasi</i>	cottony cushion scale
Pseudococcidae	
<i>Planococcus citri</i>	citrus mealybug
<i>Planococcus mali</i>	-
<i>Pseudococcus calceolariae</i>	citrophilus mealybug
<i>Pseudococcus longispinus</i>	longtailed mealybug
<i>Pseudococcus viburni</i>	obscure mealybug
Ricaniidae	
<i>Scolytopa australis</i>	passionvine hopper
Hymenoptera	
Aphelinidae	
<i>Aphytis chrysomphali</i> [Animals Biosecurity]	-
<i>Encarsia citrina</i> [Animals Biosecurity]	-
<i>Encarsia perniciosi</i> [Animals Biosecurity]	-
Encyrtidae	
<i>Coccidoctonus dubius</i> [Animals Biosecurity]	-
Formicidae	
<i>Linepithema humile</i> [Animals Biosecurity]	Argentine ant
<i>Pheidole megacephala</i> [Animals Biosecurity]	big-headed ant
Lepidoptera	
Geometridae	
<i>Pseudocoremia dejectaria</i>	-
<i>Pseudocoremia suavis</i>	pine looper
Hepialidae	
<i>Aenetus virescens</i>	puriri moth
Noctuidae	
<i>Helicoverpa armigera</i>	tomato fruitworm
<i>Spodoptera litura</i>	cluster caterpillar
Oecophoridae	
<i>Stathmopoda phlyegyra</i> [Animals Biosecurity]	-
Tortricidae	
<i>Cnephasia jactatana</i>	black lyre leafroller
<i>Ctenopseustis obliquana</i>	brownheaded leafroller
<i>Epalxiphora axenana</i>	-
<i>Epiphyas postvittana</i>	light brown apple moth
<i>Planotortrix excessana</i>	greenheaded leafroller
Orthoptera	
Tettigoniidae	
<i>Caedicia simplex</i>	katydid
Thysanoptera	
Phlaeothripidae	
<i>Nesothrips propinquus breviceps</i>	-
Thripidae	
<i>Frankliniella occidentalis</i>	western flower thrips
<i>Heliothrips haemorrhoidalis</i>	greenhouse thrips
<i>Pezothrips kellyanus</i>	Kelly's citrus thrips
<i>Thrips hawaiiensis</i>	Hawaiian flower thrips
<i>Thrips obscuratus</i>	New Zealand flower thrips
<i>Thrips tabaci</i>	onion thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
<i>Aceria sheldoni</i>	citrus bud mite
<i>Phyllocoptruta oleivora</i>	citrus rust mite
Phytoseiidae	

<i>Phytoseiulus persimilis</i> [Animals Biosecurity]	predatory mite
Stigmaeidae	
<i>Eryngiopus bifidus</i> [Animals Biosecurity]	-
Tarsonemidae	
<i>Polyphagotarsonemus latus</i>	broad mite
Tenuipalpidae	
<i>Brevipalpus californicus</i>	bunch mite
<i>Brevipalpus phoenicis</i>	passionvine mite
Tetranychidae	
<i>Eotetranychus sexmaculatus</i>	sixspotted mite
<i>Panonychus citri</i>	citrus red mite
<i>Tetranychus cinnabarinus</i>	carmine spider mite
<i>Tetranychus urticae</i>	twospotted spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
<i>Helix aspersa</i>	common garden snail
Limacidae	
<i>Deroceras reticulatum</i>	grey garden slug
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
<i>Diaporthe citri</i> (anamorph <i>Phomopsis citri</i>)	melanose
Diatrypales	
Diatrypaceae	
<i>Eutypa lata</i>	eutypa dieback
Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria dothidea</i> (anamorph <i>Fusicoccum aesculi</i>)	canker
<i>Botryosphaeria rhodina</i>	gummosis
Capnodiaceae	
<i>Capnodium salicinum</i>	sooty mould
Elsinoaceae	
<i>Elsinoe fawcettii</i> (anamorph <i>Sphaceloma fawcettii</i>)	verrucosis
Mycosphaerellaceae	
<i>Guignardia citricarpa</i> (anamorph <i>Phyllosticta citricarpa</i>) [non-pathogenic strain]	latent skin infection
<i>Mycosphaerella pinodes</i> (anamorph <i>Ascochyta pinodes</i>)	mycosphaerella blight
<i>Mycosphaerella tassiana</i> (anamorph <i>Cladosporium herbarum</i>)	black leaf spot
Pleosporaceae	
<i>Pleospora herbarum</i> (anamorph <i>Stemphylium herbarum</i>)	black mould rot
Hypocreales	
Hypocreaceae	
<i>Gibberella baccata</i> (anamorph <i>Fusarium lateritium</i>)	fusarium rot
<i>Gibberella fujikuroi</i> (anamorph <i>Fusarium fujikuroi</i>)	fusarium rot
<i>Gibberella intricans</i> (anamorph <i>Fusarium equiseti</i>)	root and stem dry rot
<i>Nectria haematococca</i> (anamorph <i>Fusarium solani</i>)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould
<i>Sclerotinia sclerotiorum</i>	cottony rot
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	anthracnose
Saccharomycetales	

Dipodascaceae	
<i>Dipodascus geotrichum</i> (anamorph <i>Geotrichum candidum</i>)	sour rot
Endomycetaceae	
<i>Endomyces geotrichum</i>	endomyces
Xylariales	
Xylariaceae	
<i>Ustulina deusta</i>	coal fungus
Basidiomycota: Basidiomycetes	
Stereales	
Hyphodermataceae	
<i>Erythricium salmonicolor</i> (anamorph <i>Necator decretus</i>)	pink disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Leptostromataceae	
<i>Gloeodes pomigena</i>	sooty blotch
Sphaerioidaceae	
<i>Ascochyta corticola</i>	ascochyta rot
<i>Lasiodiplodia theobromae</i>	fruit and stem-end rot
<i>Septoria citri</i>	septoria spot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Alternaria citri</i>	alternaria rot
<i>Alternaria hesperidearum</i>	--
Moniliaceae	
<i>Aspergillus flavus</i>	aspergillus storage rot
<i>Aspergillus niger</i>	aspergillus rot
<i>Penicillium digitatum</i>	green mould
<i>Penicillium italicum</i>	blue mould
<i>Penicillium ulaiense</i>	penicillium mould
<i>Verticillium lecanii</i> [Animals Biosecurity]	--
Tuberculariales	
Tuberculariaceae	
<i>Fusarium culmorum</i>	dry rot
<i>Fusarium oxysporum</i>	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Trichothecium roseum</i>	pink rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora citricola</i>	brown rot of fruit
<i>Phytophthora citrophthora</i>	citrus brown rot
<i>Phytophthora hibernalis</i>	citrus brown rot
<i>Phytophthora nicotianae</i> var. <i>parasitica</i>	collar and root rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus stolonifer</i>	rhizopus soft rot
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas corrugata</i>	tomato pith necrosis
<i>Pseudomonas fluorescens</i>	pink eye
<i>Pseudomonas syringae</i>	bacterial blast
<i>Pseudomonas syringae</i> pv. <i>syringae</i>	bacterial soft rot
Virus	
citrus enation - woody gall luteovirus	-

citrus exocortis viroid	-
citrus psorosis A	-
citrus psorosis B	-
citrus tristeza closterovirus [seedling yellows, decline, and stem pitting strains (except Hassuku dwarf, Capao Bonito, and Queensland and South African orange stem pitting strains)]	-
hop stunt viroid	-

Inspection, Testing and Treatment Requirements for *Fortunella**

ORGANISM TYPES	MAF ACCEPTABLE METHODS
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions).
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions).
Fungus	Country freedom OR growing season inspection for symptom expression.
Bacterium	
<i>Burkholderia cepacia</i>	Growing season inspection for symptom expression.
<i>Liberobacter africanum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Liberobacter asiaticum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Spiroplasma citri</i>	Country freedom/shoot tip grafting. Graft inoculated sweet orange, 27 to 32°C. Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot temperature (> 30°C) and incubate cultures at 32°C.
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xylella fastidiosa</i>	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
<i>Xylella fastidiosa</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus indicator.
Virus	
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures temperatures 18 to 25°C.
citrus infectious variegation ilarvirus	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus infectious variegation ilarvirus [crinkly leaf strain]	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus leaf rugose ilarvirus	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
citrus leathery leaf virus	Country freedom OR Rangpur lime. Grow indicators at cool temperatures 18 to 25°C.
citrus leprosis rhabdovirus	Country freedom OR graft inoculated sweet orange. Grow indicators at cool temperatures 18 to 25°C.
citrus mosaic virus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
citrus ringspot virus	Country freedom OR graft inoculated dweet tangor, sweet orange, mandarin (Parson's Special). Grow indicators at cool temperatures 18 to 25°C.
citrus tatter leaf capillovirus	Country freedom OR graft inoculated Rusk citrange, rough lemon, <i>Citrus excelsa</i> , citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza closterovirus [strains not in New Zealand]	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
citrus yellow mosaic badnavirus	Country freedom OR graft inoculated sweet orange, sour orange and citron.
citrus yellow mottle virus	Country freedom OR other suitable test.
Indian citrus mosaic badnavirus	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.
navel orange infectious mottling virus	Country freedom OR graft inoculated Satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.

ORGANISM TYPES	MAF ACCEPTABLE METHODS
satsuma dwarf nepovirus [Natsudaikai dwarf strain]	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
yellow vein clearing of lemon	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
Viroid	
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus viroids (groups I-IV)	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or mandarin (Parson's Special). Grow Citron at hot temperature 27 to 32°C.
Disease of unknown aetiology	
Australian citrus dieback	Country freedom OR other suitable test
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
bud union disease	Country freedom OR other suitable test
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years before releasing from quarantine.
citrus fatal yellows	Country freedom OR graft inoculated <i>Citrus macrophylla</i> .
citrus impietratura disease	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth indicators at cool temperatures 18 to 25°C.
citrus sunken vein disease	Country freedom OR other suitable test.
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
crisacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
kassala disease	Country freedom, cuttings collected from kassala free area.
lemon sieve tube necrosis	Country freedom OR other suitable test.
shell bark of lemons	Country freedom OR other suitable test.
zonate chlorosis	Country freedom, cuttings collected from kassala free area.
Phytoplasma	
<i>Candidatus</i> phytoplasma aurantifolia	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18 to 25°C.
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot temperature 27 to 32°C.

* Country freedom is accepted as equivalence to a treatment.

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. With prior notification, MAF will accept other internationally recognised testing methods.

Fragaria

Scientific name	Commodity Sub-class	Date Issued
<i>Fragaria x ananassa</i>	Whole Plants	19 June 1998

Freesia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Freesia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Virus diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

1) For bulbs produced under a MAF-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the NAKtuinbouw Elite (Class SEE or EE) or Select (Class A or E) [choose one] bulb certification scheme."

OR

2) For bulbs NOT produced under a MAF-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Fuchsia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fuchsia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Aculops fuchsiae* (Fuchsia Gall Mite)

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants or Cuttings:

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

"*Aculops fuchsiae* is not known to occur in _____ (the country or state where the plants were grown) _____".

OR

"The plants have been dipped in Carbaryl at the rate of 0.5g a.i. per litre of water".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Gentiana

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Gentiana*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Japan

Quarantine Pests: *Cronartium flaccidum*; *Tetranychus kanzawai*

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "The plants have been dipped in oxycarboxin at 1.5g a.i. per litre of water, prior to export".
2. “The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre.

B. For Tissue Cultures:

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

Gerbera

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Gerbera*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Frankliniella occidentalis*; *Liriomyza* spp.

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Gladiolus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Gladiolus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Puccinia gladioli*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

Additional Declarations:

"*Puccinia gladioli* is not known to occur in _____ (the country or state where the plants were grown) _____".

OR

"The plants were inspected during the growing season and *Puccinia gladioli* was not detected".

B. For Dormant Bulbs (Corms) from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

Cleanliness: Bulbs (corms) must be free of leafy coverings.

Additional Declaration(s):

1) For bulbs produced under a MAF-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 or ALG [choose one] bulb certification scheme."

OR

2) For bulbs NOT produced under a MAF-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Glycyrrhiza

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Glycyrrhiza*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests *Uromyces* spp.

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"*Uromyces* spp. are not known to occur on *Glycyrrhiza* in _____ (the country or state where the plants were grown) _____".

OR

"The plants were inspected during the growing season and no *Uromyces* spp. were detected".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Guzmania

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Guzmania*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Helianthus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Helianthus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Alternaria helianthi*; *Septoria helianthi*; *Phymatotrichopsis omnivora*; *Plasmopara halstedii*; *Pseudomonas* spp.; Uredinales

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

For Dormant Tubers Only:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs have been sourced from a “Pest free area”, free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a “Pest free place of production”, free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

Hippeastrum

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Hippeastrum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Hippeastrum* nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

2. Pests of *Hippeastrum*

Refer to the pest list.

3. Entry conditions for:

3.1 *Hippeastrum* dormant bulbs from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Hippeastrum* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses.

AND

- treated for regulated mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Hippeastrum* dormant bulbs in this consignment have been:

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria, phytoplasmas and viruses."

(iv) Post-entry quarantine

PEQ: Level 1

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Hippeastrum* plants in tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Hippeastrum* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Impatiens necrotic spot virus* and *Iris yellow spot virus*.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Hippeastrum* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

AND

- tested using molecular/ serological methods [choose ONE option] and found free of *Impatiens necrotic spot virus* and *Iris yellow spot virus*."

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Hippeastrum*

REGULATED PESTS (actionable)

Mite

Arachnida

Acarina

Tarsonemidae

Steneotarsonemus laticeps

bulb scale mite

Nematode

Secernentea

Tylenchida

Pratylenchidae

Pratylenchus coffeae

coffee root lesion nematode

Pratylenchus scribneri

Scribner's root lesion nematode

Fungus

mitosporic fungi (Agonomycetes)

Agonomycetales

unknown Agonomycetales

Rhizoctonia tuliparum

basal rot

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)

armillaria root rot

Bacterium

Enterobacteriaceae

Erwinia rhapontici

bacterial soft rot

Virus

Hippeastrum mosaic virus

-

Impatiens necrotic spot virus

-

Iris yellow spot virus

-

Nerine latent virus

-

NON-REGULATED PESTS (non-actionable)

Nematode

Secernentea

Tylenchida

Pratylenchidae

Pratylenchus penetrans

root lesion nematode

Fungus

Ascomycota

Leotiales

Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)

grey mould

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*)

Rolf's disease

Zygomycota: Zygomycetes

Mucorales

Mucoraceae

Rhizopus stolonifer

rhizopus soft rot

mitosporic fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Phoma glomerata

phoma fruit and leaf spot

Stagonospora curtisii

leaf scorch

mitosporic fungi (Hyphomycetes)

Hyphomycetales

Dematiaceae

Alternaria longipes

alternaria spot

Tuberculariales

Tuberculariaceae

Fusarium oxysporum

leaf spot

Bacterium

Enterobacteriaceae

Erwinia carotovora subsp. *Carotovora*

bacterial soft rot

Virus

Cucumber mosaic virus

-

Leek yellow stripe virus

-

Tobacco mosaic virus

-

Tomato spotted wilt virus

-

Humulus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Humulus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Pseudoperonospora humuli*; *Tetranychus kanzawai*; *Verticillium albo-atrum*

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

For Whole Plants and Tissue Culture:

PEQ: Level 3

Minimum Period: 3 months

Hydrangea

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Hydrangea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Tetranychus kanzawai*; *Xylella fastidiosa*

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from All Countries except Argentina, Belize, the Caribbean Islands, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States of America, Venezuela and Yugoslavia:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration(s):

1. "The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre of water".
2. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Plants in Tissue Culture from All Countries:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Ipomoea batatas

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Ipomoea batatas*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine pests: *Helicobasidium mompa*; *Streptomyces ipomoea*; virus diseases; *Xylella fastidiosa*.

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants and Tissue Cultures:

PEQ: Level 3

Minimum Period: 3 months

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Iris*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Iris* nursery stock approved for entry into New Zealand

Whole plants

Dormant bulbs

Plants in tissue culture

2. Pests of *Iris*

Refer to the pest list.

3. Entry conditions for:

3.1 *Iris* whole plants and dormant bulbs from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Iris* dormant bulbs or whole plants have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section or section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 [whole plants] or section 2.2.1.7 [dormant bulbs] of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or

Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Iris* dormant bulbs or whole plants [choose one] in this consignment have been:

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi [if applicable].

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses."

(iv) Post-entry quarantine

Whole plants and dormant bulbs

PEQ: Level 1

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants and with prior approval from a MAF Inspector.

3.1 *Iris* whole plants and dormant bulbs from the Netherlands

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Iris* dormant bulbs or whole plants have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

AND

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section or section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 [whole plants] or section 2.2.1.7 [dormant bulbs] of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Iris* dormant bulbs or whole plants [choose one] in this consignment have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi [if applicable].

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses."

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

3.3 *Iris* plants in tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Iris* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Iris severe mosaic virus*, *Iris yellow spot virus* and *Tobacco rattle virus*.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Iris* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

AND

- tested using molecular/ serological methods [choose ONE option] and found free of *Iris severe mosaic virus*, *Iris yellow spot virus* and *Tobacco rattle virus*."

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Iris*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Scarabaeidae

Popillia japonica

Japanese beetle

Homoptera

Pseudococcidae

Aleyrodes spiraeoides [whole plants only]

-

Pseudococcidae

Phenacoccus avenae

-

Phenacoccus emansor

-

Pseudococcus jackbeardsleyi [whole plants only]

Jack Beardsley mealybug

Rhizoecus palestineae

root mealybug

Lepidoptera

Hepialidae

Hepialus humuli

ghost swift moth

Hepialus lupulinus

swift moth

Noctuidae

Hydraecia micacea

potato stem borer

Macronoctua onusta

iris borer

Thysanoptera

Thripidae

Frankliniella iridis

iris thrips

Mite

Arachnida

Acarina

Tarsonemidae

Steneotarsonemus laticeps

bulb scale mite

Nematode

Secernentea

Tylenchida

Criconematidae

Hemicyclophora typica

sheath nematode

Dolichodoridae

Tylenchorhynchus gaudialis

-

Hoplolaimidae

Rotylenchus goodeyi

spiral nematode

Meloidogynidae

Meloidogyne arenaria

peanut root knot nematode

Meloidogyne ichinohei

-

Fungus

Ascomycota

Dothideales

Leptosphaeriaceae

Trematosphaeria heterospora

--

Leotiales

Sclerotiniaceae

Botryotinia convoluta (anamorph *Botrytis convallariae*)

stem rot

Botryotinia polyblastis (anamorph *Botrytis polyblastis*)

fire disease

Sclerotinia bulborum

black slime

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria mellea (anamorph *Rhizomorpha subcorticalis*) armillaria root rot

Lachnocladiales

Lachnocladiaceae

Scytinostroma eurasiaticogalactinum white root rot

Phallales

Hysterangiaceae

Hysterangium boudieri --

mitosporic fungi (Agonomycetes)

Agonomycetales

unknown Agonomycetales

Rhizoctonia tuliparum basal rot

Sclerotium rolfsii var. *delphinii* sclerotium rot

Bacterium

Pseudomonadaceae

Burkholderia gladioli pv. *gladioli* bacterial rot

Virus

Broad bean wilt virus -

Iris fulva mosaic virus -

Iris germanica leaf stripe virus -

Iris severe mosaic virus -

Iris yellow spot virus -

Japanese iris necrotic ring virus -

Tobacco rattle virus [strains not in New Zealand] -

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Curculionidae

Phlyctinus callosus

banded fruit weevil

Silvanidae

Ahasverus advena

foreign grain beetle

Diptera

Syrphidae

Eumerus strigatus

onion bulb fly

Eumerus tuberculatus

lesser bulb fly

Merodon equestris

narcissus bulb fly

Homoptera

Aphididae

Aulacorthum circumflexum

mottled arum aphid

Aulacorthum solani

foxglove aphid

Dysaphis tulipae

tulip bulb aphid

Macrosiphum euphorbiae

potato aphid

Metopolophium dirhodum [whole plants only]

rose-grain aphid

Myzus persicae [whole plants only]

green peach aphid

Rhopalosiphum rufiabdominalis [whole plants only]

rice root aphid

Coccidae

Coccus hesperidum [whole plants only]

brown soft scale

Pseudococcidae

Rhizoecus falcifer

root mealybug

Vryburgia lounsburyi

lily bulb mealybug

Lepidoptera

Pyralidae

Plodia interpunctella

Indian meal moth

Thysanoptera

Thripidae

Thrips simplex [whole plants only]

gladiolus thrips

Mite

Arachnida

Acarina

Acaridae

Acarus siro

grain mite

Rhizoglyphus echinopus

bulb mite

Tyrophagus putrescentiae

mould mite

Ascidae

Blattisocius dentriticus

common ascid mite

Proctolaelaps pygmaeus

-

Glycyphagidae

Glycyphagus domesticus

house mite

Histiomidae

Histiostoma feroniarum

damp mite

Tetranychidae

Petrobia latens [whole plants only]

brown wheat mite

Nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides blastophthorus

leaf nematode

Aphelenchoides fragariae

foliar nematode

Aphelenchoides ritzemabosi

foliar nematode

<i>Aphelenchoides subtenuis</i>	narcissus bulb and leaf nematode
Dolichodoridae	
<i>Tylenchorhynchus maximus</i>	-
Meloidogynidae	
<i>Meloidogyne hapla</i>	northern root knot nematode
<i>Meloidogyne incognita</i>	southern root knot nematode
<i>Meloidogyne javanica</i>	Javanese root knot nematode
Pratylenchidae	
<i>Pratylenchus penetrans</i>	root lesion nematode
Tylenchidae	
<i>Ditylenchus destructor</i>	potato rot nematode
<i>Ditylenchus dipsaci</i>	stem and bulb nematode
Fungus	
Ascomycota	
Dothideales	
Mycosphaerellaceae	
<i>Mycosphaerella macrospora</i> (anamorph <i>Cladosporium iridis</i>)	leaf spot
Hypocreales	
Hypocreaceae	
<i>Nectria haematococca</i> (anamorph <i>Fusarium solani</i>)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
<i>Botryotinia draytoni</i> (anamorph <i>Botrytis gladiolorum</i>)	botryotinia rot
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould
<i>Sclerotinia sclerotiorum</i>	cottony rot
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	anthracnose
Xylariales	
Xylariaceae	
<i>Rosellinia necatrix</i> (anamorph <i>Dematophora necatrix</i>)	white root rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
<i>Thanatephorus cucumeris</i> (anamorph <i>Rhizoctonia solani</i>)	rhizoctonia rot
Stereales	
Atheliaceae	
<i>Athelia rolfsii</i> (anamorph <i>Sclerotium rolfsii</i>)	Rolf's disease
Basidiomycota: Ustomycetes	
Platyglloeales	
Platyglloeaceae	
<i>Helicobasidium purpureum</i> (anamorph <i>Rhizoctonia crocorum</i>)	violet root rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora cactorum</i>	phytophthora crown and root rot
<i>Phytophthora hibernalis</i>	citrus brown rot
<i>Phytophthora nicotianae</i>	root and stem rot
<i>Pythium debaryanum</i>	leak
<i>Pythium irregulare</i>	pythium root and stem rot
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Bipolaris iridis</i>	-
Moniliaceae	
<i>Botrytis tulipae</i>	blast
Tuberculariales	
Tuberculariaceae	

<i>Fusarium oxysporum</i>	leaf spot
<i>Fusarium oxysporum</i> f. sp. <i>gladioli</i>	fusarium wilt

Bacterium

Enterobacteriaceae

<i>Erwinia carotovora</i> subsp. <i>carotovora</i>	bacterial soft rot
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Pseudomonadaceae

<i>Burkholderia gladioli</i> pv. <i>allicola</i> [whole plants only]	bacterial rot
<i>Xanthomonas campestris</i> pv. <i>tardicrescens</i>	bacterial blight

Virus

<i>Arabis mosaic virus</i>	-
<i>Bean yellow mosaic virus</i>	-
<i>Cucumber mosaic virus</i>	-
<i>Iris mild mosaic virus</i>	-
<i>Narcissus latent virus</i>	-
<i>Tobacco rattle virus</i> [Paeonia and Narcissus infecting strains]	-
<i>Tobacco ringspot virus</i>	-

Juglans

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Juglans*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Erwinia quercina* pv. *rubrifaciens*; *Erwinia nigrifluens*; *Gnomonia leptostyla*; Walnut bunch/brooming disease; Walnut blackline; *Xylella fastidiosa*.

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants and Tissue Culture:

PEQ: Level 3
Minimum Period: 6 months

Juniperus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Juniperas*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Bursaphelenchus* spp.; *Lophodermium* spp.; Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants:

PEQ: Level 3

Minimum Period: 6 months

Kalmia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Kalmia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Chrysomyxa ledi*, *Microsphaeria* spp.; *Phytophthora ramorum*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from Australia and Canada (these commodities may not be imported from other countries):

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "*Chrysomyxa ledi* and *Microsphaeria* spp. are not known to occur in _____ (the country or state of where the plants were grown) _____".

OR

"The plants were inspected during the growing season and no *Chrysomyxa ledi* or *Microsphaeria* spp. was detected".

2. "The plants have been dipped prior to export in propiconazole at the rate of 0.5g a.i. per litre of water."

3. "The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum*".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Liatris*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, USA.

Quarantine Pests: *Phymatotrichopsis omnivora*; Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on _____(the host species being imported)_____ in _____ (the country in which the plants were grown) _____".

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from the USA:

No import permit is required unless the bulbs require post-entry quarantine.

PEQ: None or Level 2 (see below)

Additional Declaration(s):

1. "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests".

2. "The dormant tubers have been sourced from a “Pest free area”, free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a "Pest free place of production", free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Lilium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Lilium* nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

2. Pests of *Lilium*

Refer to the pest list.

3. Entry conditions for:

3.1 *Lilium* dormant bulbs from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Lilium* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses.

AND

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Lilium* dormant bulbs in this consignment have been:

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses."

(iv) Post-entry quarantine

PEQ: Level 1

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants (including inspection for bulbils) and with prior approval from a MAF Inspector.

3.2 *Lilium* dormant bulbs from the Netherlands

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Lilium* dormant bulbs have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) ALG bulb certification scheme.

AND

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Lilium* dormant bulbs in this consignment have been:

- produced in accordance with the requirements of the BKD Class ALG bulb certification scheme.

AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses."

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

3.3 *Lilium* plants in tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Lilium* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Apple stem grooving virus* and *Tobacco rattle virus*.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Lilium* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

AND

- tested using molecular/ serological methods [choose ONE option] and found free of *Apple stem grooving virus* and *Tobacco rattle virus*."

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Lilium*

REGULATED PESTS (actionable)

Insect

Insecta

Collembola

Entomobryidae

Entomobrya multifasciata

Springtail

Lepidoptera

Yponomeutidae

Acrolepiopsis liliivora

-

Mite

Arachnida

Acarina

Acaridae

Schwiebea cuncta

-

Schwiebea taiwanensis

-

Tenuipalpidae

Brevipalpus lillum

false spider mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Xiphinema insigne

dagger nematode

Trichodoridae

Paratrichodorus spp. (except *P. lobatus*, *P. minor*, *P. pachydermus*, *P. porosus*)

-

Trichodorus spp. (except *T. christiei*, *T. cottieri*, *T. porosus*, *T. primitivus*)

-

Secernentea

Tylenchida

Meloidogynidae

Meloidogyne spp. (except *M. ardenensis*, *M. hapla*, *M. incognita*, *M. javanica*, *M. naasi*)

-

Pratylenchidae

Pratylenchus brachyurus

root lesion nematode

Fungus

Ascomycota

Dothideales

Mycosphaerellaceae

Didymellina intermedia

black rot

Mycosphaerella martagonis

black blotch

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)

armillaria root rot

Auriculariales

Auriculariaceae

Helicobasidium mompa

violet root rot

Basidiomycota: Teliomycetes

Uredinales

Pucciniaceae

Puccinia sporoboli (anamorph *Aecidium lili*)

Rust

Uromyces aecidiiformis

rust fungi

<i>Uromyces holwayi</i>	-
mitosporic fungi (Agonomycetes)	
Agonomycetales	
unknown Agonomycetales	
<i>Rhizoctonia tuliparum</i>	basal rot
<i>Sclerotium rolfsii</i> var. <i>delphinii</i>	sclerotium rot
<i>Sclerotium wakkeri</i>	Blackleg
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophoma lillii</i>	black root rot
<i>Phyllosticta lillicola</i>	black rot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum lillii</i>	-
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
<i>Botrytis hyacinthi</i>	hyacinth blight
<i>Ramularia vallisumbrosae</i>	white mould
Tuberculariales	
Tuberculariaceae	
<i>Fusarium oxysporum</i> f. sp. <i>lillii</i>	basal rot
unknown Hyphomycetes	
unknown Hyphomycetes	
<i>Aureobasidium microstictum</i>	-
Bacterium	
Enterobacteriaceae	
<i>Erwinia lillii</i>	-
Virus	
<i>Apple stem grooving virus</i> [strains not in New Zealand]	-
<i>Lily mottle virus</i>	-
<i>Lily rosette virus</i>	-
<i>Lily virus X</i>	-
<i>Tobacco rattle virus</i> [strains not in New Zealand]	-
<i>Tomato ringspot virus</i> [strains not in New Zealand]	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Anobiidae

Lasioderma serricorne

cigarette beetle

Curculionidae

Sitophilus oryzae

rice weevil

Silvanidae

Oryzaephilus mercator

merchant grain beetle

Diptera

Syrphidae

Eumerus strigatus

onion bulb fly

Merodon equestris

narcissus bulb fly

Homoptera

Aleyrodidae

Trialeurodes vaporariorum

greenhouse whitefly

Aphididae

Aulacorthum circumflexum

mottled arum aphid

Dysaphis tulipae

tulip bulb aphid

Pseudococcidae

Pseudococcus longispinus

longtailed mealybug

Vryburgia lounsburyi

lily bulb mealybug

Lepidoptera

Pyralidae

Ephestia cautella

tropical warehouse moth

Thysanoptera

Phlaeothripidae

Liothrips vaneeckei

lily bulb thrips

Thripidae

Thrips simplex

gladiolus thrips

Mite

Arachnida

Acarina

Acaridae

Caloglyphus mycophagus

-

Rhizoglyphus callae

bulb mite

Rhizoglyphus echinopus

bulb mite

Rhizoglyphus robini

bulb mite

Tyrophagus similis

-

Histiomidae

Histiostoma feroniarum

damp mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Xiphinema diversicaudatum

European dagger nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides fragariae

foliar nematode

Aphelenchoides ritzemabosi

foliar nematode

Hoplolaimidae	
<i>Rotylenchus robustus</i>	spiral nematode
Pratylenchidae	
<i>Pratylenchus penetrans</i>	root lesion nematode
<i>Pratylenchus pratensis</i>	root lesion nematode
<i>Pratylenchus vulnus</i>	root lesion nematode
Tylenchidae	
<i>Ditylenchus dipsaci</i>	stem and bulb nematode
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria rhodina</i> (anamorph <i>Lasiodiplodia theobromae</i>)	Gummosis
Hypocreales	
Hypocreaceae	
<i>Bionectria ochroleuca</i> (anamorph <i>Gliocladium roseum</i>)	fusarium rot
<i>Gibberella fujikuroi</i> (anamorph <i>Fusarium fujikuroi</i>)	fusarium rot
<i>Nectria haematococca</i> (anamorph <i>Fusarium solani</i>)	fusarium fruit rot
<i>Nectria radicola</i> (anamorph <i>Cylindrocarpon destructans</i>)	Rot
Leotiales	
Sclerotiniaceae	
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould
<i>Sclerotinia sclerotiorum</i>	cottony rot
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	Anthraxnose
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
<i>Thanatephorus cucumeris</i> (anamorph <i>Rhizoctonia solani</i>)	rhizoctonia rot
Stereales	
Atheliaceae	
<i>Athelia rolfsii</i> (anamorph <i>Sclerotium rolfsii</i>)	Rolf's disease
Basidiomycota: Ustomycetes	
Platyglloeales	
Platyglloeaceae	
<i>Helicobasidium purpureum</i> (anamorph <i>Rhizoctonia crocorum</i>)	violet root rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora cactorum</i>	phytophthora crown and root rot
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
<i>Phytophthora nicotianae</i>	buckeye rot
<i>Pythium splendens</i>	basal stem and root rot
<i>Pythium ultimum</i>	Leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus stolonifer</i>	rhizopus soft rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophomina phaseolina</i>	ashy stem blight
unknown Coelomycetes	

unknown Coelomycetes	
<i>Colletotrichum dematium</i>	Anthracnose
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Thielaviopsis basicola</i>	black root rot
Moniliaceae	
<i>Botrytis elliptica</i>	botrytis blight
<i>Botrytis tulipae</i>	Blast
Tuberculariales	
Tuberculariaceae	
<i>Fusarium oxysporum</i> f. sp. <i>narcissi</i>	basal rot
Bacterium	
Corynebacteriaceae	
<i>Corynebacterium fascians</i>	Fasciation
Virus	
<i>Apple stem grooving virus</i> [Malus infecting strain]	-
<i>Arabidopsis mosaic virus</i>	-
<i>Lily symptomless virus</i>	-
<i>Narcissus mosaic virus</i>	-
<i>Tobacco rattle virus</i> [Paeonia and Narcissus infecting strains]	-
<i>Tomato aspermy virus</i>	-
<i>Tomato ringspot virus</i> [Grape yellow vein strain]	-
<i>Tulip breaking virus</i> (syn. <i>Tulip mosaic virus</i>)	-

Lithocarpus densiflorus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Lithocarpus densiflorus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Cronartium quercuum*; *Ceratocystis fagacearum*; Tortricidae

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants (dormant) and Cuttings (dormant):

OPTION 1:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration:

1. "*Ceratocystis fagacearum* is not known to occur in _____ (the country or state where the plants/cuttings were grown) _____".

OR (for cuttings)

"The tree(s), from which this material was taken, was inspected during the previous growing season and no *Ceratocystis fagacearum* was detected".

OR (for young plants)

"The plants were inspected during the previous growing season and no *Ceratocystis fagacearum* was detected".

2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water".

OPTION 2:

PEQ: Level 3

Minimum Period: 6 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Litchi

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Litchi*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia

Quarantine Pests: *Aceria litchii*; Xyloryctidae (Lepidoptera)

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration:

"The plants were grown on a nursery that has been inspected for the presence of *Aceria litchii* and members of the Xyloryctidae and none were found".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2

Lophophora williamsii

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Lophophora williamsii*, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

Import permit: an import permit is required. Before applying for an import permit, the importer must obtain written approval to import from:

**Director General of Health
Ministry of Health
PO Box 5013
Wellington
Attention: Advisor, Controlled Drug Licensing**

Telephone: 04 496 2438

Malus

Scientific name	Commodity Sub-class	Date Issued
<i>Malus sylvestris</i> var. <i>domestica</i>	Cuttings (dormant)	12 June 1998

Mangifera

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Mangifera*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, India, Pakistan, Mexico, Philippines

Quarantine Pests: *Xanthomonas campestris* pv. *mangiferae-indicae*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants and Tissue Culture:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration:

"*Xanthomonas campestris* pv. *mangiferae-indicae* is not known to occur in _____ (the country or state where the plants were grown) _____".

OR

"The plants were inspected during the growing season and no *Xanthomonas campestris* pv. *mangiferae-indicae* was detected".

Musa

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Musa*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Cosmopolites sordidus*; *Fusarium oxysporum* f.sp. *cubense*; *Mycosphaerella fijiensis*; *Pseudomonas solanacearum*; *Radopholus similis*; Bunchy top virus

Entry Conditions : **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3
Minimum Period: 3 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer;

PLUS

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of Bunchy top virus".

Nandina

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Nandina*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Bamboo mosaic virus

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"Bamboo mosaic virus is not known to occur in _____ (the country or state where the plants were grown) _____".

OR

"The plants have been inspected during the growing season and no bamboo mosaic virus was detected".

B. For Tissue Cultures:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of bamboo mosaic virus"

Narcissus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Narcissus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Frankliniella occidentalis*; *Hepialus lupulinus*; *Lilioceris lili*; *Pratylenchus scribneri*; *Ramularia vallisumbrosae*; *Sclerotinia polyblastis*; *Steneotarsonemus laticeps*; virus diseases.

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

1) For bulbs produced under a MAF-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 or ALG [choose one] bulb certification scheme."

OR

2) For bulbs NOT produced under a MAF-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Olea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Olea* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

2. Pests of *Olea*

Refer to the pest list.

3. Entry conditions for:

3.1 *Olea* cuttings and tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Olea* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Olea* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only]. No additional declarations are required.

(iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(v) *Post-entry quarantine*

PEQ: All *Olea* nursery stock must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator*.

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 12 months in post-entry quarantine and will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Olea*”, at the expense of the importer. Twelve months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Olea*

REGULATED PESTS (actionable)

Insect

Insecta

Insecta

Coccidae

Saissetia privigna

black scale

Coleoptera

Attelabidae

Rhynchites cribripennis

twig cutter

Buprestidae

Anthaxia ariadna

wood-boring beetle

Scolytidae

Hylesinus fraxini

bark beetle

Hylesinus oleiperda

bark beetle

Hylesinus toranio

bark beetle

Phloeotribus oleae

bark beetle

Phloeotribus scarabaeiodes

bark beetle

Xylosandrus compactus

black twig borer

Diptera

Cecidomyiidae

Thomasiniana sp.

olive bark midge

Asterolecaniidae

Pollinia pollini

globe shaped olive scale

Coccidae

Ceroplastes rusci

fig wax scale

Lichtensia viburni

scale

Metacaronema japonica

scale insect

Diaspididae

Aonidomytilus espinosai

scale

Hemiberlesia palmae

palm scale

Leucaspis riccae

scale

Lindingaspis ferrisi

scale

Parlatoria oleae

olive scale

Pseudaulacaspis pentagona

white peach scale

Selenaspis articulatus

West Indian red scale

Lepidoptera

Pyralidae

Euzophera pinguis

bark borer

Mite

Arachnida

Acarina

Eriophyidae

Aceria cretica

mite

Aceria oleae

olive mite

Aculops benakii

olive yellow spot mite

Aculus olearius

olive mite

Ditrymacus athiasellus

olive mite

Eriophyes oleae

olive bud mite

Eriophyes olivi

olive mite

Oxycenus maxwelli

olive leaf and flower mite

Oxycenus niloticus

olive leaf and flower mite

Oxycenus noloticus

olive leaf and flower mite

Tegonotus hassani

olive rust mite

Tenuipalpidae	
<i>Brevipalpus chalkidicus</i>	false spider mite
<i>Brevipalpus macedonicus</i>	false spider mite
<i>Brevipalpus oleae</i>	false spider mite
<i>Brevipalpus olearius</i>	false spider mite
<i>Brevipalpus olivicola</i>	false spider mite
<i>Raoiella macfarlanei</i>	false spider mite
<i>Tenuipalpus caudatus</i>	false spider mite
Tetranychidae	
<i>Eotetranychus lewisi</i>	big beaked plum mite
Fungus	
Ascomycota	
Dothideales	
Capnodiaceae	
<i>Capnodium elaeophilum</i>	sooty mould
Elsinoaceae	
<i>Elsinoe oleae</i>	olive scab
Unknown Dothideales	
<i>Massariella oleae</i>	bark canker
<i>Massariella zambettakiana</i>	canker
<i>Zukalia purpurea</i>	black mildew
Xylariales	
Xylariaceae	
<i>Xylaria sicula</i>	root rot
Basidiomycota	
Agaricales	
Agaricaceae	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i>)	armillaria root rot
Boletales	
Paxillaceae	
<i>Omphalotus olearius</i>	wood rot
Ganodermatales	
Ganodermataceae	
<i>Ganoderma lucidum</i> (anamorph <i>Polyporus lucidus</i>)	wood rot
Hymenochaetales	
Hymenochaetaceae	
<i>Phellinus igniarius</i>	wood rot
Poriales	
Coriolaceae	
<i>Fomes fomentarius</i>	wood decay
<i>Fomes fulvus</i>	wood rot
<i>Fomes salicinus</i>	wood rot
<i>Fomes torulosus</i>	wood rot
<i>Fomes yucatonensis</i>	wood rot
Polyporaceae	
<i>Polyporus biennis</i>	wood rot
<i>Polyporus oleae</i>	wood rot
Stereales	
Sistotremataceae	
<i>Trechispora brinkmanii</i> (anamorph <i>Phymatotrichopsis omnivorum</i>)	Texas root rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Camarosporium dalmatica</i>	brown spot
<i>Cytospora oleina</i>	canker
<i>Macrophoma dalmatica</i>	fruit rot
<i>Phoma incompta</i>	stem blight
<i>Phyllosticta oleae</i>	phyllosticta leaf spot
<i>Septoria obesa</i>	leaf spot

<i>Septoria oleae</i>	leaf spot
<i>Septoria oleagina</i>	leaf spot
<i>Septoria serpentaria</i>	leaf spot
<i>Sphaeropsis dalmatica</i>	stem gall
<i>Sphaeropsis oleae</i>	stem gall
Unknown Coelomycetes	
Unknown Coelomycetes	
<i>Cylindrosporium olivae</i>	leaf spot
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas syringae</i> pv. <i>garcae</i>	twig blight
Virus	
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	-
<i>Olive latent 1 virus</i>	-
<i>Olive latent 2 virus</i>	-
<i>Olive latent ringspot virus</i>	-
<i>Olive leaf yellowing-associated virus</i>	-
<i>Olive vein yellow virus</i>	-
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	-
Phytoplasma	
Olive witches' broom phytoplasma	-
Disease of unknown aetiology	
Infectious yellows	-
Leaf malformation	-
Olive sickle leaf disease	-
Olive yellow mosaic disease	-
Olive yellow mottling and decline	-
Partial paralysis	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coccidae

Saissetia coffeae

hemispherical scale

Saissetia oleae

black scale

Diaspididae

Aonidiella aurantii

California red scale

Aspidiotus nerii

oleander scale

Hemiberlesia lataniae

latania scale

Lepidosaphes ulmi

oystershell scale

Lindingaspis rossi

Ross' black scale

Margarodidae

Icerya purchasi

cottony cushion scale

Mite

Arachnida

Acarina

Eriophyidae

Phyllocoptruta oleivora

citrus rust mite

Tenuipalpidae

Brevipalpus phoenicis

passionvine mite

Fungus

Ascomycota

Dothideales

Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)

canker

Erysiphales

Erysiphaceae

Leveillula taurica (anamorph *Oidiopsis sicula*)

powdery mildew

Eurotiales

Trichocomaceae

Eurotium herbariorum (anamorph *Aspergillus glaucus*)

mould

Hypocreales

Hypocreaceae

Gibberella avenacea (anamorph *Fusarium avenaceum*)

fusarium stem canker

Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)

fusarium rot

Nectria haematococca (anamorph *Fusarium solani*)

fusarium fruit rot

Phyllachorales

Phyllachoraceae

Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)

bitter rot

Saccharomycetales

Dipodascaceae

Dipodascus geotrichum (anamorph *Geotrichum candidum*)

sour rot

Xylariales

Xylariaceae

Rosellinia necatrix (anamorph *Dematophora necatrix*)

white root rot

Basidiomycota

Hymenochaetales

Hymenochaetaceae

Phellinus punctatus

heart rot

Poriales

Coriolaceae

Trametes versicolor

white rot

Schizophyllales	
Schizophyllaceae	
<i>Schizophyllum commune</i>	agaric stem rot
Stereales	
Atheliaceae	
<i>Athelia rolfsii</i> (anamorph <i>Sclerotium rolfsii</i>)	Rolf's disease
Stereaceae	
<i>Stereum hirsutum</i>	black measles
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophomina phaseolina</i>	ashy stem blight
Unknown Coelomycetes	
Unknown Coelomycetes	
<i>Colletotrichum acutatum</i>	anthracnose
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Mycocentrospora cladosporioides</i>	fruit spot
<i>Spilocaea oleaginea</i>	peacock spot
Moniliaceae	
<i>Aspergillus niger</i>	aspergillus rot
<i>Penicillium chrysogenum</i>	penicillium mould rot
<i>Penicillium expansum</i>	blue mould rot
<i>Verticillium albo-atrum</i>	verticillium wilt
<i>Verticillium dahliae</i>	verticillium wilt
Tuberculariales	
Tuberculariaceae	
<i>Fusarium oxysporum</i>	leaf spot
<i>Fusarium roseum</i>	fusarium rot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Trichothecium roseum</i>	pink rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora cambivora</i>	-
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus stolonifer</i>	rhizopus soft rot
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas savastanoi</i> pv. <i>nerii</i>	olive knot
<i>Pseudomonas savastanoi</i> pv. <i>savastanoi</i>	olive knot
<i>Ralstonia solanacearum</i>	bacterial wilt
Rhizobiaceae	
<i>Agrobacterium tumefaciens</i>	crown gall
Virus	
<i>Arabidopsis mosaic virus</i>	-
<i>Cherry leaf roll virus</i> [red raspberry strain]	-
<i>Cucumber mosaic virus</i>	-
<i>Strawberry latent ringspot virus</i> [Prunus-infecting strain]	-

Inspection, Testing and Treatment Requirements for *Olea*

ORGANISM TYPES	MAF-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only].
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] or binocular microscope inspection in PEQ [plants in tissue culture only].
Fungi	Growing season inspection in PEQ for disease symptom expression.
Bacterium	
<i>Pseudomonas syringae</i> pv. <i>garcae</i>	Growing season inspection in PEQ for disease symptom expression.
Virus	
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators Ca, Cq and Nb AND TEM.
<i>Olive latent 1 virus</i>	Herbaceous indicators Ca, Cq and Nb AND TEM.
<i>Olive latent 2 virus</i>	Herbaceous indicators Ca, Cq and Nb AND TEM.
<i>Olive latent ringspot virus</i>	Herbaceous indicators Ca and Cq AND TEM.
<i>Olive leaf yellowing-associated virus</i>	TEM.
<i>Olive vein yellow virus</i>	TEM.
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators Ca and Cq AND TEM.
Phytoplasmas	Woody indicators AND PCR using the universal phytoplasma fU5/rU3 primers (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 primers (Gundersen <i>et al.</i> 1996).
Diseases of unknown aetiology	Growing season inspection in PEQ for disease symptom expression.

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. Transmission electron microscopy (TEM) – each plant must be observed under the TEM for virus particles.
3. Indicator hosts: *Chenopodium amaranticolor* (Ca), *Chenopodium quinoa* (Cq), and *Nicotiana benthamiana* (Nb). At least two plants of each indicator species must be used in mechanical inoculation tests.
4. Indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
5. Enzyme linked immunosorbent assay (ELISA); Polymerase chain reaction (PCR).
6. Testing must be carried out on *Olea* plants while they are in active growth. For bioassay and ELISA, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the plant and an older leaf from a midway position.
7. PCR and ELISA must be validated using positive controls/reference material prior to use in quarantine testing.
8. Positive and negative controls must be used in ELISA tests.

9. Positive and negative controls (including a blank water control) must be used in PCR. Ideally positive internal controls and a negative plant control should be used. Internal controls in PCR tests are important to avoid the risk of false negatives.
10. Inspect *Olea* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
11. With prior notification, MAF will accept other internationally recognised testing methods.

References

- Gundersen, D.E., Lee, I.M. 1996. Ultrasensitive detection of phytoplasmas by nested-PCR assays using two universal primer pairs. *Phytopathologia Mediterranea* 35: 144-151.
- Lorenz, K.H., Scheider, B., Ahrens, U., Seemuller, E. 1995. Detection of the Apple proliferation and Pear decline phytoplasmas by PCR Amplification of ribosomal and nonribosomal DNA. *Phytopathology* 85: 771-776.

***Paeonia* (herbaceous species)**

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Paeonia* (herbaceous)”.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America

Quarantine Pests: *Cronartium flaccidum*; *Phymatotrichopsis omnivora*

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

For Dormant Tubers:

PEQ: Level 1 or Level 2 (see below)

Minimum Period: 3 months

Additional Declaration(s):

1. "The dormant tubers have been sourced from a “Pest free area” or “Pest free place of production”, free from *Cronartium flaccidum*".

2. "The dormant tubers have been sourced from a “Pest free area”, free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a “Pest free place of production”, free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

Paeonia (tree species)

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Paeonia* (tree species)”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America

Quarantine Pests: *Cronartium flaccidum*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 1

Minimum Period: 3 months

Isolation: open ground - 400m from any *Pinus* tree

Additional Declarations:

1. "*Cronartium flaccidum* is not known to occur in ___ (the country or state where the plants were grown) ___".
2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2;

Papaver somniferum

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Papaver somniferum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

Import permit: an import permit is required. Before applying for an import permit, the importer must obtain written approval to import from:

**Director General of Health
Ministry of Health
PO Box 5013
Wellington
Attention: Advisor, Controlled Drug Licensing**

Telephone: 04 496 2438

Paulownia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Paulownia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia

Quarantine Pests: Witches broom phytoplasma

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"Witches broom phytoplasma is not known to occur in _____ (the country or state where the plants were grown) _____".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2;

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of Witches broom phytoplasma".

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Persea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Persea* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

2. Pests of *Persea*

Refer to the pest list.

3. Entry conditions for:

3.1 *Persea* cuttings and tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Persea* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Persea* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a “Pest free area” or “Pest free place of production”, free from *Avocado cryptic virus 3*, *Potato spindle tuber viroid* and Avocado black streak disease.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 within 7 days prior to shipment [cuttings only].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only] and by providing the following additional declaration to the phytosanitary certificate:

"The *Persea* cuttings / plants in tissue culture [choose ONE option] have been:

- sourced from a “Pest free area” and/or a “Pest free place of production”, free from *Avocado cryptic virus 3*, *Potato spindle tuber viroid* and Avocado black streak disease."

(iv) *Post-entry quarantine*

PEQ: All *Persea* nursery stock must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator.*

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 12 months in post-entry quarantine and will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Persea*”, at the expense of the importer. Twelve months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Persea*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Chrysomelidae

Monolepta apicalis

monolepta beetle

Monolepta australis

red-shouldered leaf beetle

Curculionidae

Copturus aguacatae

branch boring weevil

Diaprepes abbreviatus

citrus weevil

Heilipus squamosus

-

Naupactus xanthographus

fruit tree weevil

Hemiptera

Coreidae

Amblypelta lutescens

banana spotting bug

Amblypelta nitida

fruit-spotting bug

Pseudothoraptus wayi

coreid bug

Lygaeidae

Nysius ericae

false chinch bug

Tingidae

Pseudacysta perseae

avocado lace bug

Homoptera

Aleyrodidae

Aleurocanthus woglumi

citrus blackfly

Parabemisia myricae

Japanese bayberry whitefly

Paraleyrodes minei

whitefly

Paraleyrodes perseae

plumeria whitefly

Tetraleurodes perseae

whitefly

Trialeurodes floridensis

avocado whitefly

Coccidae

Ceroplastes floridensis

Florida wax scale

Ceroplastes rubens

red wax scale

Ceroplastes rusci

fig wax scale

Chloropulvinaria psidii

guava scale

Protospulvinaria pyriformis

pyriform scale

Pulvinaria mammeae

-

Diaspididae

Aonidiella orientalis

oriental yellow scale

Aspidiotus destructor

coconut scale

Chrysomphalus aonidum

Florida red scale

Chrysomphalus dictyospermi

dictyospermum scale

Fiorinia fioriniae

fiorinia scale

Pinnaaspis strachani

hibiscus snow scale

Selenaspidus articulatus

West Indian red scale

Margarodidae

Icerya seychellarum

Seychelles scale

Pseudococcidae

Dysmicoccus brevipes

pineapple mealybug

Ferrisia virgata

striped mealybug

Nipaecoccus nipae

coconut mealybug

Planococcus citri

citrus mealybug

Psyllidae

Trioza aguacate

psyllid

Trioza anceps

psyllid

Trioza godoyae

psyllid

<i>Trioza perseae</i>	psyllid
Hymenoptera	
Formicidae	
<i>Atta cephalotes</i>	leaf-cutting ant
Lepidoptera	
Geometridae	
<i>Ascotis selenaria</i>	mugwort looper
<i>Sabulodes aegrotata</i>	omnivorous looper
Hesperiidae	
<i>Pyrrhopyge chalybea</i>	swift moth
Noctuidae	
<i>Peridroma margaritosa</i>	-
<i>Prodenia eridania</i>	-
<i>Pseudoplusia includens</i>	soybean looper
Oecophoridae	
<i>Stenoma catenifer</i>	stenomid moth
Pyralidae	
<i>Cryptoblabes gnidiella</i>	Christmas berry webworm
<i>Stericta albifasciata</i>	-
Tortricidae	
<i>Amorbia cuneana</i>	leafroller
<i>Amorbia emigratella</i>	Mexican leafroller
<i>Amorbia essigana</i>	leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Homona spargotis</i>	avocado leafroller
<i>Isotenes miserana</i>	orange fruitborer
<i>Platynota stultana</i>	omnivorous leafroller
Thysanoptera	
Thripidae	
<i>Retithrips syriacus</i>	black vine thrips
<i>Selenothrips rubrocinctus</i>	red-banded thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
<i>Oligonychus coffeae</i>	tea red spider mite
<i>Oligonychus perseae</i>	spider mite
<i>Oligonychus punicae</i>	avocado brown mite
<i>Oligonychus yothersi</i>	avocado red mite
Fungus	
Ascomycota	
Hypocreales	
Hypocreaceae	
<i>Nectria pseudotrichia</i> (anamorph <i>Tubercularia lateritia</i>)	canker
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> var. <i>minor</i> (anamorph <i>Colletotrichum gloeosporioides</i> var. <i>minus</i>)	anthracnose
Xylariales	
Xylariaceae	
<i>Rosellinia bunodes</i>	-
<i>Rosellinia pepo</i>	-

Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora palmivora</i>	black rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Phomopsis perseae</i>	fruit rot
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Pseudocercospora purpurea</i>	cercospora spot blotch
unknown Hyphomycetes	
unknown Hyphomycetes	
<i>Stilbella cinnabarina</i>	-
Virus	
<i>Avocado cryptic virus 3</i>	-
Viroid	
<i>Avocado sunblotch viroid</i> [strains not in New Zealand]	-
<i>Potato spindle tuber viroid</i>	-
Disease of unknown aetiology	
Avocado black streak	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Curculionidae

Asynonychus cervinus

Fuller's rose weevil

Hemiptera

Pentatomidae

Nezara viridula

green vegetable bug

Homoptera

Aleyrodidae

Trialeurodes vaporariorum

greenhouse whitefly

Aphididae

Aphis gossypii

cotton aphid

Aphis spiraecola

spirea aphid

Coccidae

Ceroplastes ceriferus

Indian white wax scale

Ceroplastes destructor

white wax scale

Coccus hesperidum

brown soft scale

Parasaissetia nigra

nigra scale

Parthenolecanium corni

European fruit scale

Saissetia coffeae

hemispherical scale

Saissetia oleae

black scale

Diaspididae

Aonidiella aurantii

California red scale

Aspidiotus nerii

oleander scale

Hemiberlesia lataniae

latania scale

Hemiberlesia rapax

greedy scale

Pseudococcidae

Pseudococcus calceolariae

citrophilus mealybug

Pseudococcus longispinus

longtailed mealybug

Thysanoptera

Thripidae

Heliethrips haemorrhoidalis

greenhouse thrips

Mite

Arachnida

Acarina

Phytoseiidae

Amblyseius limonicus [Animals Biosecurity]

-

Tarsonemidae

Polyphagotarsonemus latus

broad mite

Tetranychidae

Eotetranychus sexmaculatus

sixspotted mite

Fungus

Ascomycota

Dothideales

Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)

canker

Botryosphaeria obtusa (anamorph *Sphaeropsis malorum*)

blight

Botryosphaeria parva (anamorph *Fusicoccum parvum*)

canker

Botryosphaeria rhodina (anamorph *Lasiodiplodia theobromae*)

gummosis

Hypocreales

Hypocreaceae

Calonectria kytensis (anamorph *Cylindrocladium scoparium*)

root and stem rot

Xylariales

Xylariaceae	
<i>Rosellinia necatrix</i> (anamorph <i>Dematophora necatrix</i>)	white root rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Dothiorella aromatica</i>	stem-end rot
<i>Fusicoccum luteum</i>	bunch rot
<i>Nattrassia mangiferae</i>	stem-end rot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum acutatum</i>	anthracnose
<i>Pestalotiopsis versicolor</i>	pestalotiopsis rot
<i>Sphaceloma perseae</i>	scab
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Cladosporium cladosporioides</i>	cladosporium leaf spot
Moniliaceae	
<i>Verticillium dahliae</i>	verticillium wilt
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas syringae</i> pv. <i>syringae</i>	bacterial soft rot
Rhizobiaceae	
<i>Rhizobium radiobacter</i>	crown gall
Virus	
<i>Tobacco mosaic virus</i>	-
Viroid	
<i>Avocado sunblotch viroid</i> [mild strain]	-
Alga	
Chlorophyta	
Trentepohliales	
Chroolepidaceae	
<i>Cephaleuros virescens</i>	algal leaf spot

Inspection, Testing and Treatment Requirements for *Persea*

ORGANISM TYPES	MAF-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.5 of the basic conditions) [cuttings only].
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.5 of the basic conditions) [cuttings only] or binocular microscope inspection in PEQ [plants in tissue culture only].
Fungi	Growing season inspection in PEQ for disease symptom expression.
Virus	
<i>Avocado cryptic virus 3</i>	Pest free area or Pest free place of production AND Growing season inspection in PEQ for disease symptom expression.
Viroid	
<i>Avocado sunblotch viroid</i> [strains not in New Zealand]	Hybridisation or PAGE or PCR (Schnell <i>et al.</i> 1997) (two sets).
<i>Potato spindle tuber viroid</i>	Pest free area or Pest free place of production AND Growing season inspection in PEQ for disease symptom expression.
Disease of unknown aetiology	
Avocado black streak	Pest free area or Pest free place of production AND Growing season inspection in PEQ for disease symptom expression.

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. Testing must be carried out on *Persea* plants while they are in active growth.
3. Polymerase chain reaction (PCR), Polyacrylamide gel electrophoresis (PAGE) and hybridisation must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control) must be used in molecular tests. Ideally positive internal controls and a negative plant control should be used.
4. Inspect *Persea* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
5. With prior notification, MAF will accept other internationally recognised testing methods.

References

Schnell RJ, Kuhn DN, Ronning CM, Harkins D (1997). Application of RT-PCR for indexing avocado sunblotch viroid. *Plant Disease* B: 1023-1026.

Philodendron

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Philodendron*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Phoenix

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Phoenix*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Hawaii, mainland USA

Quarantine Pests: Lethal yellowing; cadang-cadang; Fusarium wilt

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

PEQ: Level 2

Minimum Period: 3 months

Height Limit: Plants must not exceed 1.5m in height

Additional Declaration:

"Cadang cadang, lethal yellowing and *Fusarium oxysporum* f.sp. *canariensis* are not known to occur in _____ (the country or state where the plants were grown) _____."

Photinia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Photinia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Gymnosporangium* spp.

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "*Gymnosporangium* spp. are not known to occur on _____ (name of plant species) _____ in _____ (the country or state where the plants were produced) _____".

OR

"The plants were from a crop inspected during the growing season and no rust diseases were detected".

2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue cultures** - see Section 2.2.2.

Planera

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Planera*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Elm mosaic virus, Elm phloem necrosis

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants and Tissue Cultures:

PEQ: Level 3

Minimum Period: 3 months

Polyscias

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Polyscias*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Poncirus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Poncirus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Poncirus* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

2. Pests of *Poncirus*

Refer to the pest list.

3. Entry conditions for:

3.1 *Poncirus* cuttings from offshore MAF-accredited facilities (quarantine stations)

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Poncirus*, the accredited facility operator must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Poncirus*.

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* cuttings exported to New Zealand.

(ii) Inspection, Testing and Treatments of the consignment

The inspection, testing and treatment requirements for specified regulated pests must be undertaken at the accredited facility as specified in the agreement between MAF and the accredited facility operator. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Poncirus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).
AND
- sourced from either mother plants that have been kept in insect proof plant houses or from open ground mother plants
AND
- held and tested for/classified free from specified regulated pests at a MAF-accredited facility
AND
- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with New Zealand's current phytosanitary requirements.

AND

- sourced from mother plants that have been kept in insect proof plant houses/sourced from open ground mother plants [choose one].

AND

- held and tested for/classified free from specified regulated pests at the accredited facility as required in the agreement between MAF and the accredited facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

(v) Post-entry quarantine

PEQ: Level 2

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pathogens. Indicative minimum quarantine periods are: 6 months for *Poncirus* cuttings sourced from mother plants that have been kept in insect proof plant houses, or 16 months for *Poncirus* cuttings sourced directly from open ground mother plants. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Poncirus* cuttings from non-accredited facilities in any country

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* cuttings exported to New Zealand.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Poncirus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free

of any visually detectable regulated pests specified by MAF, and to conform with the current phytosanitary requirements of MAF."

(iv) Inspection, Testing and Treatments of the consignment

Following inspection at the border, upon arrival, the *Poncirus* cuttings will be directed to a facility accredited to the MAF standard BMG-STD-TREAT: *Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export*, to be sprayed/dipped in MAF-approved miticide and insecticides as described in section 2.2.1.6 of the basic conditions.

Following treatment, testing for specified regulated pests must be undertaken at a New Zealand Level 3 MAF-accredited facility. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(v) Post-entry quarantine

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pathogens. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

3.3 *Poncirus* plants in tissue culture from offshore MAF-accredited facilities

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Poncirus*, the accredited facility operator must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Poncirus*.

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* tissue culture exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Inspection, Testing and Treatments of the consignment

The inspection, treatment and testing requirements for specified pests must be undertaken at the accredited facility as specified in the arrangement between MAF and the accredited facility operator. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(iv) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Poncirus* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

AND

- held and tested for/classified free from specified regulated pests at a MAF-accredited facility and,

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

(v) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with New Zealand's current phytosanitary requirements.

AND

- held and tested for/classified free from specified regulated pests at the accredited facility as specified in the agreement between MAF and the accredited facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

(vi) Post-entry quarantine

PEQ: Level 2

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

3.4 *Poncirus* plants in tissue culture from non-accredited facilities in any country

(i) Documentation

Import permit is required

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* nursery stock exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Poncirus* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF (refer to the pest list).

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MAF, and to conform with the current phytosanitary requirements of MAF."

(v) Inspection, Testing and Treatments of the consignment

Upon arrival, the inspection, treatment and testing requirements for specified pests must be undertaken at a New Zealand Level 3 MAF-accredited facility. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(vi) Post-entry quarantine

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and or indexing to detect regulated pests. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected or treatments required.

Pest List for *Poncirus*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Bostrichidae

Apate indistincta

shot-hole borer

Apate terebrans

shot-hole borer

Buprestidae

Agrilus alesi

flatheaded citrus borer

Agrilus auriventris

citrus flatheaded borer

Cerambycidae

Anoplophora malasiaca

white-spotted longicorn beetle

Chelidonium gibbicolle

-

Dihammus vastator

fig longhorn

Melanauster chinensis

-

Paradisterna plumifera

speckled longicorn

Promeces linearis

-

Skeletodes tetrops

longhorn beetle

Strongylurus thoracicus

pittosporum longicorn

Uracanthus cryptophagus

citrus branch borer

Chrysomelidae

Colasposoma fulgidum

bluegreen citrus nibbler

Colasposoma scutellare

-

Geloptera porosa

pitted apple beetle

Luperomorpha funesta

mulberry flea beetle

Monolepta australis

red-shouldered leaf beetle

Sebaethe fulvipennis

flea beetle

Coccinellidae

Cheilomenes lunata [Animals Biosecurity]

-

Chilocorus cacti [Animals Biosecurity]

-

Chilocorus distigma [Animals Biosecurity]

-

Chilocorus nigrita [Animals Biosecurity]

-

Exochomus flavipes [Animals Biosecurity]

-

Pentilia castanea [Animals Biosecurity]

-

Rhyzobius lophanthae [Animals Biosecurity]

-

Scymnus nanus [Animals Biosecurity]

-

Serangium parcesetosum [Animals Biosecurity]

-

Stethorus aethiops [Animals Biosecurity]

-

Stethorus histrio [Animals Biosecurity]

-

Stethorus punctata picipes [Animals Biosecurity]

-

Curculionidae

Amystax fasciatus [Animals Biosecurity]

-

Artipus sp.

-

Brachycerus citriperda

-

Callirhopalus bifasciatus

two-banded Japanese weevil

Dereodus recticollis

-

Diaprepes abbreviatus

citrus weevil

Diaprepes spp.

-

Eutinophaea bicristata

citrus leaf-eating weevil

Leptopius squalidus

fruit tree root weevil

Naupactus xanthographus

fruit tree weevil

Otiorhynchus cribricollis

cribrate weevil

Pachnaeus citri

-

Pachnaeus litus

citrus root weevil

Perperus lateralis

white-striped weevil

Prepodes spp.

-

<i>Protostrophus avidus</i>	weevil
<i>Sciobius marshalli</i>	citrus snout beetle
<i>Sympiezomias lewisi</i>	-
Lucanidae	
<i>Prosopocoilus spencei</i>	-
Scarabaeidae	
<i>Hypopholis indistincta</i>	scarab beetle
<i>Maladera matrida</i>	scarab beetle
Scolytidae	
<i>Salagena</i> sp.	-
<i>Xylosandrus germanus</i>	alnus ambrosia beetle
Diptera	
Cecidomyiidae	
<i>Contarinia citri</i>	leafcurling midge
<i>Contarinia okadai</i>	citrus flower gall midge
<i>Trisopsis</i> sp.	-
Chamaemyiidae	
<i>Leucopis alticeps</i> [Animals Biosecurity]	-
Drosophilidae	
<i>Drosophila paulistorum</i>	-
<i>Drosophila pseudoobscura</i>	-
<i>Drosophila simulans</i>	-
<i>Drosophila willistoni</i>	-
Tephritidae	
<i>Dirioxa pornia</i>	island fruit fly
Hemiptera	
Anthocoridae	
<i>Orius thripoborus</i> [Animals Biosecurity]	-
<i>Thripleps thripoborus</i> [Animals Biosecurity]	-
Coreidae	
<i>Acanthocoris striicornis</i>	larger squash bug
<i>Anoplocnemis curvipes</i>	coreid bug
<i>Leptoglossus membranaceus</i>	coreid bug
<i>Mictis profana</i>	crusader bug
<i>Paradasynus spinosus</i>	squash bug
<i>Veneza phyllopus</i>	leaf-footed bug
Lygaeidae	
<i>Nysius vinitor</i>	Rutherglen bug
Miridae	
<i>Austropeplus</i> sp.	citrus blossom bug
Pentatomidae	
<i>Antestia variegata</i>	antestia bug
<i>Antestiopsis orbitalis</i>	-
<i>Antestiopsis variegata</i>	antestia bug
<i>Biprorulus bibax</i>	spined citrus bug
<i>Glaucias subpunctatus</i>	polished green stink bug
<i>Halyomorpha mista</i>	brown-marmorated stink bug
<i>Musgraveia sulciventris</i>	bronze orange bug
<i>Plautia stali</i>	oriental stink bug
<i>Rhynchocoris humeralis</i>	pentatomid bug
Unknown Hemiptera	
<i>Holopterna vulga</i>	bug
Homoptera	
Aleyrodidae	
<i>Aleurocanthus citripertus</i>	whitefly
<i>Aleurocanthus spiniferus</i>	orange spiny whitefly
<i>Aleurocanthus</i> spp.	whiteflies
<i>Aleurocanthus woglumi</i>	citrus blackfly
<i>Aleurodicus dispersus</i>	spiralling whitefly
<i>Aleurolobus marlatti</i>	Marlatt whitefly

<i>Aleuroplatus</i> sp.	whitefly
<i>Aleurothrixus floccosus</i>	woolly whitefly
<i>Aleurotuba jelinekii</i>	-
<i>Aleurotuberculatus aucubae</i>	aucuba whitefly
<i>Bemisia citricola</i>	-
<i>Dialeurodes citri</i>	citrus whitefly
<i>Dialeurodes citrifolii</i>	cloudywinged whitefly
<i>Dialeurolonga</i> sp.	-
<i>Parabemisia myricae</i>	Japanese bayberry whitefly
<i>Siphoninus phillyreae</i>	phillyrea whitefly
Aphididae	
<i>Aphis fabae</i>	bean aphid
<i>Aulacorthum magnoliae</i>	Japanese elder aphid
Cicadellidae	
<i>Asymmetrasca decedens</i>	leafhopper
<i>Circulifer opacipennis</i>	-
<i>Circulifer tenellus</i>	beet leafhopper
<i>Cuerna costalis</i>	leafhopper
<i>Edwardsiana flavescens</i>	leafhopper
<i>Empoasca bodenheimeri</i>	-
<i>Empoasca citrusa</i>	green citrus leafhopper
<i>Empoasca decipiens</i>	green leafhopper
<i>Empoasca distinguenda</i>	-
<i>Empoasca fabae</i>	potato leafhopper
<i>Empoasca onukii</i>	tea green leafhopper
<i>Homalodisca coagulata</i>	glassy-winged sharpshooter
<i>Homalodisca lacerta</i>	-
<i>Jacobiasca lybica</i>	cotton jassid
<i>Neoaliturus haematoceps</i>	leafhopper
<i>Penthimiola bella</i>	citrus leafhopper
<i>Scaphytopius nitridus</i>	leafhopper
Cicadidae	
<i>Cryptotympana facialis</i>	black cicada
<i>Meimuna opalifera</i>	elongate cicada
Coccidae	
<i>Ceroplastes floridensis</i>	Florida wax scale
<i>Ceroplastes japonicus</i>	pink wax scale
<i>Ceroplastes rubens</i>	red wax scale
<i>Ceroplastes rusci</i>	fig wax scale
<i>Coccus celatus</i>	-
<i>Coccus pseudomagnoliarum</i>	citricola scale
<i>Coccus viridis</i>	green scale
<i>Cribrolecanium andersoni</i>	white powdery scale
<i>Gascardia brevicauda</i>	white waxy scale
<i>Protopulvinaria pyriformis</i>	pyriform scale
<i>Pulvinaria aethiopica</i>	soft green scale
<i>Pulvinaria aurantii</i>	citrus cottony scale
<i>Pulvinaria cellulosa</i>	pulvinaria scale
<i>Saissetia citricola</i>	citrus string cottony scale
<i>Saissetia somereni</i>	-
Dactylopiidae	
<i>Dactylopius filamentosis</i>	-
<i>Dactylopius vastator</i>	-
Diaspididae	
<i>Aonidiella citrina</i>	yellow scale
<i>Chrysomphalus aonidium</i>	Florida red scale
<i>Chrysomphalus bifasciculatus</i>	brown scale
<i>Chrysomphalus dictyospermi</i>	dictyospermum scale
<i>Chrysomphalus pinnulifera</i>	false purple scale
<i>Ischnaspis longirostris</i>	black thread scale

<i>Lepidosaphes beckii</i>	purple scale
<i>Lepidosaphes gloverii</i>	Glover scale
<i>Parlatoria ziziphi</i>	black parlatoria scale
<i>Pseudaonidia duplex</i>	camphor scale
<i>Selenaspidus articulatus</i>	West Indian red scale
<i>Unaspis citri</i>	citrus snow scale
<i>Unaspis yanonensis</i>	Japanese citrus scale
Flatidae	
<i>Colgar peracuta</i>	-
<i>Geisha distinctissima</i>	green broad-winged planthopper
<i>Lawana conspersa</i>	green flatid planthopper
<i>Metcalfa pruinosa</i>	planthopper
Fulgoridae	
<i>Anzora unicolor</i>	-
Margarodidae	
<i>Drosicha howardi</i>	persimmon mealybug
<i>Icerya seychellarum</i>	Seychelles scale
Ortheziidae	
<i>Nipponorthezia ardisiae</i>	ensign scale
Pseudococcidae	
<i>Allococcus</i> spp.	-
<i>Ferrisia consobrina</i>	mealybug
<i>Ferrisia virgata</i>	striped mealybug
<i>Nipaecoccus vastator</i>	nipa mealybug
<i>Nipaecoccus viridis</i>	hibiscus mealybug
<i>Paracoccus burnerae</i>	spherical mealybug
<i>Planococcus kraunhiae</i>	Japanese wisteria mealybug
<i>Planococcus lilacinus</i>	citrus mealybug
<i>Planococcus minor</i>	passionvine mealybug
<i>Pseudococcus citriculus</i>	smaller citrus mealybug
<i>Pseudococcus commonus</i>	-
<i>Pseudococcus filamentosus</i>	mealybug
<i>Rastrococcus spinosus</i>	mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
Psyllidae	
<i>Diaphorina citri</i>	citrus psyllid
<i>Trioza erytreae</i> [vector]	citrus psyllid
Ricaniidae	
<i>Scolypopa</i> sp.	-
Tropiduchidae	
<i>Tambinia</i> sp.	-
Hymenoptera	
Aphelinidae	
<i>Aphytis africanus</i> [Animals Biosecurity]	-
<i>Aphytis holoxanthus</i> [Animals Biosecurity]	-
<i>Aphytis lepidosaphes</i> [Animals Biosecurity]	-
<i>Aphytis lingnanensis</i> [Animals Biosecurity]	-
<i>Aphytis melinus</i> [Animals Biosecurity]	-
<i>Azotus platensis</i> [Animals Biosecurity]	-
<i>Cales noacki</i> [Animals Biosecurity]	-
<i>Cales orchamoplati</i> [Animals Biosecurity]	-
<i>Centrodora penthymiae</i> [Animals Biosecurity]	-
<i>Coccophagus caridei</i> [Animals Biosecurity]	-
<i>Coccophagus pulvinariae</i> [Animals Biosecurity]	-
<i>Encarsia ectopaga</i> [Animals Biosecurity]	-
<i>Encarsia lahorensis</i> [Animals Biosecurity]	-
<i>Encarsia lounsburyi</i> [Animals Biosecurity]	-
<i>Encarsia opulenta</i> [Animals Biosecurity]	-
<i>Encarsia smithi</i> [Animals Biosecurity]	-
<i>Eretmocerus serius</i> [Animals Biosecurity]	-

<i>Marietta connecta</i> [Animals Biosecurity]	-
<i>Marietta leopardina</i> [Animals Biosecurity]	-
Braconidae	
<i>Apanteles aristotalilae</i> [Animals Biosecurity]	-
<i>Biosteres longicaudatus</i> [Animals Biosecurity]	-
<i>Pholetesor ornigis</i> [Animals Biosecurity]	-
Encyrtidae	
<i>Anicetus beneficus</i> [Animals Biosecurity]	-
<i>Comperiella bifasciata</i> [Animals Biosecurity]	-
<i>Habrolepis rouxi</i> [Animals Biosecurity]	-
<i>Leptomastix dactylopii</i> [Animals Biosecurity]	parasitic wasp
<i>Metaphycus helvolus</i> [Animals Biosecurity]	-
<i>Metaphycus luteolus</i> [Animals Biosecurity]	-
<i>Metaphycus stanleyi</i> [Animals Biosecurity]	-
<i>Metaphycus varius</i> [Animals Biosecurity]	-
<i>Psyllaephagus pulvinatus</i> [Animals Biosecurity]	-
Eulophidae	
<i>Aprostocetus ceroplastae</i> [Animals Biosecurity]	-
<i>Elachertus fenestratus</i> [Animals Biosecurity]	-
<i>Tamarixia radiatus</i> [Animals Biosecurity]	-
Eupelmidae	
<i>Anastatus biproruli</i> [Animals Biosecurity]	-
Eurytomidae	
<i>Bruchophagus fellis</i>	citrus gall midge
Formicidae	
<i>Acromyrmex octospinosus</i>	leaf-cutting ant
<i>Anoplolepis braunsi</i> [Animals Biosecurity]	-
<i>Anoplolepis custodiens</i>	ant
<i>Anoplolepis steingroeveri</i> [Animals Biosecurity]	black ant
<i>Atta cephalotes</i>	leaf-cutting ant
<i>Atta sexdens</i>	-
<i>Atta texana</i>	Texas leaf-cutting ant
<i>Camponotus rufoglaucus</i>	-
<i>Crematogaster castanea</i>	-
<i>Crematogaster liengmei</i>	-
<i>Crematogaster peringueyi</i> [Animals Biosecurity]	cocktail ant
<i>Lepisiota capensis</i> [Animals Biosecurity]	-
<i>Myrmecaria natalensis</i>	-
<i>Pheidole tenuinodis</i>	ant
<i>Polyrhachis schistaceus</i>	ant
<i>Solenopsis invicta</i> [Animals Biosecurity]	red imported fire ant
<i>Tapinoma arnoldi</i>	-
<i>Technomyrmex albipes foreli</i> [Animals Biosecurity]	-
Mymaridae	
<i>Chaetomyrmex gracile</i> [Animals Biosecurity]	-
<i>Chaetomyrmex lepidum</i> [Animals Biosecurity]	-
<i>Gonatocerus incomptus</i> [Animals Biosecurity]	-
Platygasteridae	
<i>Amitus hesperidum</i> [Animals Biosecurity]	-
<i>Amitus spiniferus</i> [Animals Biosecurity]	-
<i>Fidiobia citri</i> [Animals Biosecurity]	-
Scelionidae	
<i>Trissolcus oeneus</i> [Animals Biosecurity]	-
<i>Trissolcus oenone</i> [Animals Biosecurity]	-
<i>Trissolcus ogyges</i> [Animals Biosecurity]	-
Signiphoridae	
<i>Signiphora fax</i> [Animals Biosecurity]	-
<i>Signiphora flavella</i> [Animals Biosecurity]	-
<i>Signiphora perpauca</i> [Animals Biosecurity]	-
Trichogrammatidae	

<i>Trichogramma platneri</i> [Animals Biosecurity]	-
Vespidae	
<i>Polistes</i> spp. [Animals Biosecurity]	paper wasps
Isoptera	
Termitidae	
<i>Odontotermes lokanandi</i>	termite
Lepidoptera	
Arctiidae	
<i>Lemyra imparilis</i>	mulberry tiger moth
Blastobasidae	
<i>Holocera iceryaeella</i>	-
Cosmopterigidae	
<i>Pyroderces rileyi</i>	pink scavenger caterpillar
Geometridae	
<i>Anacamptodes fragilaria</i>	koa haole looper
<i>Ascotis selenaria reciprocaria</i>	citrus looper
<i>Gymnoscelis ruffasciata</i>	geometrid moth
<i>Hyposidra talaca</i>	-
Gracillariidae	
<i>Phyllocnistis citrella</i>	citrus leafminer
Hepialidae	
<i>Endoclyta excrescens</i>	Japanese swift moth
<i>Endoclyta sinensis</i>	-
Lycaenidae	
<i>Virachola isocrates</i>	pomegranate butterfly
Lymantriidae	
<i>Orgyia vetusta</i>	western tussock moth
Metarbelidae	
<i>Indarbela tetraonis</i>	stem borer
Noctuidae	
<i>Arcte coerulea</i>	fruit-piercing moth
<i>Eudocima fullonia</i>	fruit-piercing moth
<i>Helicoverpa assulta</i>	cape gooseberry budworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Tiracola plagiata</i>	banana fruit caterpillar
<i>Xylomyges curialis</i>	noctuid moth
Nymphalidae	
<i>Charaxes jasius</i>	nymphalid butterfly
Oecophoridae	
<i>Psorosticha melanocrepida</i>	citrus leafroller
<i>Psorosticha zizyphi</i>	citrus leafroller
<i>Stathmopoda auriferella</i>	apple heliodinid
Papilionidae	
<i>Papilio aegeus aegeus</i>	-
<i>Papilio anactus</i>	small citrus butterfly
<i>Papilio crespontes</i>	orange dog
<i>Papilio dardanus cenea</i>	-
<i>Papilio demodocus</i>	orange dog
<i>Papilio demoleus demoleus</i>	-
<i>Papilio helenus nicconicolens</i>	-
<i>Papilio machaon asiatica</i>	-
<i>Papilio memnon</i>	citrus swallowtail
<i>Papilio memnon thunbergii</i>	-
<i>Papilio nireus lyaeus</i>	-
<i>Papilio polytes polytes</i>	-
<i>Papilio protenor demetrius</i>	-
<i>Papilio xuthus</i>	citrus swallowtail
<i>Papilio zelicaon</i>	anise swallowtail
Psychidae	
<i>Eumeta hardenbergi</i>	-

<i>Eumeta japonica</i>	-
<i>Eumeta minuscula</i>	tea bagworm
<i>Eumeta moddermanni</i>	-
<i>Hyalarcta huebneri</i>	leaf case moth
Pyralidae	
<i>Apomyelois ceratoniae</i>	date pyralid
Tortricidae	
<i>Adoxophyes</i> sp.	-
<i>Amorbia cuneana</i>	leafroller
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Archips machlopi</i>	leafroller
<i>Archips occidentalis</i>	leafroller
<i>Archips rosanus</i>	rose leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Cryptophlebia batrachopa</i>	-
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Homona magnanima</i>	oriental tea tortrix
<i>Isotenes miserana</i>	orange fruitborer
<i>Platynota stultana</i>	omnivorous leafroller
<i>Tortrix capensana</i>	tortricid moth
Yponomeutidae	
<i>Prays citri</i>	citrus flower moth
<i>Prays parilis</i>	citrus flower moth
Neuroptera	
Chrysopidae	
<i>Chrysopa oculata</i> [Animals Biosecurity]	-
Coniopterygidae	
<i>Coniopteryx vicina</i> [Animals Biosecurity]	-
<i>Conwentzia barretti</i> [Animals Biosecurity]	-
Orthoptera	
Acrididae	
<i>Zonocerus elegans</i>	elegant grasshopper
Gryllidae	
<i>Ornebius kanetataki</i>	cricket
Tettigoniidae	
<i>Caedicia</i> sp.	-
<i>Holochlora japonica</i>	Japanese broadwinged katydid
<i>Microcentrum retinerve</i>	smaller angular-winged katydid
<i>Scudderia furcata</i>	fork-tailed bush katydid
Psocoptera	
Archipsocidae	
<i>Archipsocus</i> sp.	bark louse
Thysanoptera	
Aeolothripidae	
<i>Franklinothrips vespiformis</i> [Animals Biosecurity]	-
Thripidae	
<i>Chaetanaphothrips orchidii</i>	banana rust thrips
<i>Leptothrips mali</i>	black hunter thrips
<i>Scirtothrips aurantii</i>	citrus thrips
<i>Scirtothrips citri</i>	citrus thrips
<i>Scirtothrips dorsalis</i>	chilli thrips
<i>Scirtothrips mangiferae</i>	mango thrips
<i>Scolothrips sexmaculatus</i> [Animals Biosecurity]	-
<i>Taeniothrips kellyanus</i>	-
<i>Taeniothrips</i> sp.	-
<i>Thrips coloratus</i>	thrips
<i>Thrips flavus</i>	flower thrips
<i>Thrips palmi</i>	palm thrips
Unknown Insecta	

Unknown Insecta

Cosmophyllum pallidulum -

Mite

Arachnida

Acarina

Acaridae

Thyreophagus entomophagus italicus [Animals Biosecurity] -

Anystidae

Anystis agilis [Animals Biosecurity] -

Eriophyidae

Aculops pelekassi eriophyid mite
Tegolophus australis brown citrus mite

Phytoseiidae

Amblyseius addoensis [Animals Biosecurity] -
Amblyseius citri [Animals Biosecurity] -
Amblyseius swirskii [Animals Biosecurity] -
Euseius hibisci [Animals Biosecurity] -
Euseius scutalis [Animals Biosecurity] -
Euseius stipulatus [Animals Biosecurity] -
Euseius tularensis [Animals Biosecurity] -
Iphiseius degenerans [Animals Biosecurity] predatory mite
Typhlodromus athiasae [Animals Biosecurity] -

Stigmaeidae

Agistemus africanus [Animals Biosecurity] -
Agistemus tranatalensis [Animals Biosecurity] -
Eryngiopus siculus [Animals Biosecurity] -

Tarsonemidae

Tarsonemus cryptocephalus [Animals Biosecurity] -

Tenuipalpidae

Brevipalpus chilensis false spider mite
Brevipalpus lewisi bunch mite
Brevipalpus obovatus privet mite
Tenuipalpus emeticae [Animals Biosecurity] -
Tuckerella ornata -
Ultratenuipalpus gonianaensis tenuipalpid mite

Tetranychidae

Calacarus citrifolii clover mite
Eotetranychus kankitus tetranychid mite
Eotetranychus lewisi big beaked plum mite
Eotetranychus yumensis Yumi spider mite
Eutetranychus africanus tetranychid mite
Eutetranychus banksi Texas citrus mite
Eutetranychus orientalis pear leaf blister mite
Oligonychus mangiferus mango spider mite
Tetranychus kanzawai kanzawa mite

Tuckerellidae

Tuckerella knorri hawthorn spider mite

Spider

Arachnida

Araneae

Clubionidae

Cheiracanthium mildei [Animals Biosecurity] -

Theridiidae

Theridion sp. [Animals Biosecurity] -

Mollusc

Gastropoda

Stylommatophora

Achatinidae	
<i>Achatina immaculata</i>	-
<i>Lissachatina immaculata</i>	snail
Bradybaenidae	
<i>Acusta despecta sieboldiana</i>	snail
Subulinidae	
<i>Rumina decollata</i>	snail
Urocyclidae	
<i>Urocyclus flavescens</i>	-
<i>Urocyclus kirkii</i>	-
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
<i>Diaporthe rudis</i> (anamorph <i>Phomopsis rudis</i>)	phomopsis canker
Dothideales	
Elsinoaceae	
<i>Elsinoe australis</i>	sweet orange scab
Capnodiaceae	
<i>Capnodium citri</i>	sooty mould
Didymosphaeriaceae	
<i>Didymosphaeria</i> sp.	--
Mycosphaerellaceae	
<i>Guignardia citricarpa</i> (anamorph <i>Phyllosticta citricarpa</i>) [black spot strain]	citrus black spot
<i>Mycosphaerella citri</i> (anamorph <i>Stenella citri-grisea</i>)	rind blotch
<i>Mycosphaerella horii</i>	greasy spot
Patellariales	
Patellariaceae	
<i>Rhytidhysteron rufulum</i>	--
Saccharomycetales	
Saccharomycetaceae	
<i>Debaryomyces hansenii</i>	-
<i>Galactomyces citri-aurantii</i> (anamorph <i>Geotrichum citri-aurantii</i>)	sour rot
Basidiomycota: Basidiomycetes	
Boletales	
Coniophoraceae	
<i>Coniophora eremophila</i>	brown wood rot
Basidiomycota: Teliomycetes	
Septobasidiales	
Septobasidiaceae	
<i>Septobasidium pseudopedicellatum</i>	felt fungus
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
<i>Sphaceloma fawcettii</i> var. <i>scabiosa</i>	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophoma mantegazziana</i>	-
<i>Phoma erratica</i> var. <i>mikan</i>	--
<i>Phoma tracheiphila</i>	mal secco
<i>Phomopsis</i> sp.	rot
<i>Septoria</i> spp.	-
<i>Sphaeropsis tumefaciens</i>	stem gall
Unknown Coelomycetes	
Unknown Coelomycetes	
<i>Aschersonia placenta</i> [Animals Biosecurity]	--

<i>Gloeosporium foliicolum</i>	fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria limicola</i>	-
<i>Alternaria pellucida</i>	--
<i>Cercospora microsora</i>	-
<i>Phaeoramularia angolensis</i>	cercospora spot
<i>Stemphylium rosarium</i>	--
<i>Ulocladium obovoideum</i>	ulocladium rot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Aureobasidium</i> sp.	-
<i>Hirsutella thompsonii</i> [Animals Biosecurity]	--
<i>Isaria</i> sp. [Animals Biosecurity]	-
<i>Oidium tingitaninum</i>	powdery mildew
<i>Sporobolomyces roseus</i>	--
<i>Stenella</i> sp.	--
Zygomycota: Zygomycetes	
Glomales	
Glomaceae	
<i>Glomus etunicatum</i> [Animals Biosecurity]	--
Mucorales	
Syncephalastraceae	
<i>Syncephalastrum racemosum</i>	--
Bacterium	
Bacterium family unknown	
<i>Liberobacter africanum</i>	citrus greening bacterium
<i>Liberobacter asiaticum</i>	citrus greening bacterium
<i>Liberobacter</i> sp.	citrus greening bacterium
<i>Spiroplasma citri</i>	citrus stubborn
Pseudomonadaceae	
<i>Burkholderia cepacia</i>	sour skin
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	citrus canker
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	-
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	citrus bacterial spot
<i>Xylella fastidiosa</i>	Pierce's disease
<i>Xylella fastidiosa</i> pv. <i>citri</i>	variegated chlorosis of citrus
Virus	
Indian citrus mosaic badnavirus	-
citrus cachexia viroid	-
citrus chlorotic dwarf	-
citrus infectious variegation ilarvirus	-
citrus infectious variegation ilarvirus [crinkly leaf strain]	-
citrus leaf rugose ilarvirus	-
citrus leathery leaf virus	-
citrus leprosis rhabdovirus	-
citrus mosaic virus	-
citrus ringspot virus	-
citrus tatter leaf capillovirus	-
citrus tristeza closterovirus [strains not in New Zealand]	-
citrus variable viroid	-
citrus viroids (groups I-IV)	-
citrus yellow mosaic badnavirus	-
citrus yellow mottle virus	-
dwarfing factor viroid	-
navel orange infectious mottling virus	-
satsuma dwarf nepovirus	-

satsuma dwarf nepovirus [Natsudaikai dwarf strain]	-
xyloporosis viroid	-
yellow vein clearing of lemon	-

Phytoplasma

<i>Candidatus</i> Phytoplasma aurantifolia	witches' broom phytoplasma
rubbery wood	-

Disease of unknown aetiology

Australian citrus dieback	-
blind pocket	-
bud union disease	-
citrus blight disease	-
citrus fatal yellows	-
citrus impletatura disease	-
citrus sunken vein disease	-
concave gum	-
crisacortis	-
gum pocket	-
gummy bark	-
kassala disease	-
lemon sieve tube necrosis	-
shell bark of lemons	-
zonate chlorosis	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Anthribidae

Araecerus fasciculatus coffee bean weevil

Cerambycidae

Oemona hirta lemon tree borer

Coccinellidae

Cryptolaemus montrouzieri mealybug destroyer

Rodolia cardinalis [Animals Biosecurity]

Curculionidae

Asynonychus cervinus Fuller's rose weevil

Listroderes obliquus vegetable weevil

Maleuterpes spinipes dicky rice weevil

Phlyctinus callosus banded fruit weevil

Scarabaeidae

Costelytra zealandica grass grub

Diptera

Cryptochaetidae

Cryptochetum iceryae [Animals Biosecurity]

Drosophilidae

Drosophila melanogaster vinegar fly

Hemiptera

Pentatomidae

Nezara viridula green vegetable bug

Homoptera

Aleyrodidae

Orchamoplatus citri Australian citrus whitefly

Aphididae

Aphis craccivora cowpea aphid

Aphis gossypii cotton aphid

Aphis nerii oleander aphid

Aphis spiraeicola spirea aphid

Macrosiphum euphorbiae potato aphid

Myzus cerasi black cherry aphid

Myzus persicae green peach aphid

Toxoptera aurantii black citrus aphid

Toxoptera citricida brown citrus aphid

Coccidae

Ceroplastes ceriferus Indian white wax scale

Ceroplastes destructor white wax scale

Ceroplastes sinensis Chinese wax scale

Coccus hesperidum brown soft scale

Coccus longulus long brown scale

Saissetia coffeae hemispherical scale

Saissetia oleae black scale

Diaspididae

Aonidiella aurantii California red scale

Aspidiotus hederiae oleander scale

Aspidiotus nerii oleander scale

Diaspis santali scale

Lindingaspis rossi Ross' black scale

Lopholeucaspis japonica pear white scale

Parlatoria pergandii chaff scale

Pinnaaspis aspidistrae fern scale

Quadraspidiotus perniciosus San Jose scale

Flatidae	
<i>Siphanta acuta</i>	green planthopper
Margarodidae	
<i>Icerya purchasi</i>	cottony cushion scale
Pseudococcidae	
<i>Planococcus citri</i>	citrus mealybug
<i>Planococcus mali</i>	-
<i>Pseudococcus calceolariae</i>	citrophilus mealybug
<i>Pseudococcus longispinus</i>	longtailed mealybug
<i>Pseudococcus viburni</i>	obscure mealybug
Ricaniidae	
<i>Scolytopa australis</i>	passionvine hopper
Hymenoptera	
Aphelinidae	
<i>Aphytis chrysomphali</i> [Animals Biosecurity]	-
<i>Encarsia citrina</i> [Animals Biosecurity]	-
<i>Encarsia perniciosi</i> [Animals Biosecurity]	-
Encyrtidae	
<i>Coccidoctonus dubius</i> [Animals Biosecurity]	-
Formicidae	
<i>Linepithema humile</i> [Animals Biosecurity]	Argentine ant
<i>Pheidole megacephala</i> [Animals Biosecurity]	big-headed ant
Lepidoptera	
Geometridae	
<i>Pseudocoremia dejectaria</i>	-
<i>Pseudocoremia suavis</i>	pine looper
Hepialidae	
<i>Aenetus virescens</i>	puriri moth
Noctuidae	
<i>Helicoverpa armigera</i>	tomato fruitworm
<i>Spodoptera litura</i>	cluster caterpillar
Oecophoridae	
<i>Stathmopoda phlyegyra</i> [Animals Biosecurity]	-
Tortricidae	
<i>Cnephasia jactatana</i>	black lyre leafroller
<i>Ctenopseustis obliquana</i>	brownheaded leafroller
<i>Epalxiphora axenana</i>	-
<i>Epiphyas postvittana</i>	light brown apple moth
<i>Planotortrix excessana</i>	greenheaded leafroller
Orthoptera	
Tettigoniidae	
<i>Caedicia simplex</i>	katydid
Thysanoptera	
Phlaeothripidae	
<i>Nesothrips propinquus breviceps</i>	-
Thripidae	
<i>Frankliniella occidentalis</i>	western flower thrips
<i>Heliothrips haemorrhoidalis</i>	greenhouse thrips
<i>Pezothrips kellyanus</i>	Kelly's citrus thrips
<i>Thrips hawaiiensis</i>	Hawaiian flower thrips
<i>Thrips obscuratus</i>	New Zealand flower thrips
<i>Thrips tabaci</i>	onion thrips

Mite
Arachnida

Acarina

Eriophyidae

Aceria sheldoni

citrus bud mite

Phyllocoptruta oleivora

citrus rust mite

Phytoseiidae

Phytoseiulus persimilis [Animals Biosecurity]

predatory mite

Stigmaeidae

Eryngiopus bifidus [Animals Biosecurity]

-

Tarsonemidae

Polyphagotarsonemus latus

broad mite

Tenuipalpidae

Brevipalpus californicus

bunch mite

Brevipalpus phoenicis

passionvine mite

Tetranychidae

Eotetranychus sexmaculatus

sixspotted mite

Panonychus citri

citrus red mite

Tetranychus cinnabarinus

carmine spider mite

Tetranychus urticae

twospotted spider mite

Mollusc

Gastropoda

Stylommatophora

Helicidae

Helix aspersa

common garden snail

Limacidae

Deroceras reticulatum

grey garden slug

Fungus

Ascomycota

Diaporthales

Valsaceae

Diaporthe citri (anamorph *Phomopsis citri*)

melanose

Diatrypales

Diatrypaceae

Eutypa lata

eutypa dieback

Dothideales

Botryosphaeriaceae

Botryosphaeria dothidea (anamorph *Fusicoccum aesculi*)

canker

Botryosphaeria rhodina

gummosis

Capnodiaceae

Capnodium salicinum

sooty mould

Elsinoaceae

Elsinoe fawcettii (anamorph *Sphaceloma fawcettii*)

verrucosis

Mycosphaerellaceae

Guignardia citricarpa (anamorph *Phyllosticta citricarpa*) [non-pathogenic strain]

latent skin infection

Mycosphaerella pinodes (anamorph *Ascochyta pinodes*)

mycosphaerella blight

Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)

black leaf spot

Pleosporaceae

Pleospora herbarum (anamorph *Stemphylium herbarum*)

black mould rot

Hypocreales

Hypocreaceae

Gibberella baccata (anamorph *Fusarium lateritium*)

fusarium rot

Gibberella fujikuroi (anamorph *Fusarium fujikuroi*)

fusarium rot

Gibberella intricans (anamorph *Fusarium equiseti*)

root and stem dry rot

Nectria haematococca (anamorph *Fusarium solani*)

fusarium fruit rot

Leotiales

Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)

grey mould

Sclerotinia sclerotiorum

cottony rot

Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	anthracnose
Saccharomycetales	
Dipodascaceae	
<i>Dipodascus geotrichum</i> (anamorph <i>Geotrichum candidum</i>)	sour rot
Endomycetaceae	
<i>Endomyces geotrichum</i>	endomycetes
Xylariales	
Xylariaceae	
<i>Ustulina deusta</i>	coal fungus
Basidiomycota: Basidiomycetes	
Stereales	
Hyphodermataceae	
<i>Erythricium salmonicolor</i> (anamorph <i>Necator decretus</i>)	pink disease
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Leptostromataceae	
<i>Gloeodes pomigena</i>	sooty blotch
Sphaerioidaceae	
<i>Ascochyta corticola</i>	ascochyta rot
<i>Lasiodiplodia theobromae</i>	fruit and stem-end rot
<i>Septoria citri</i>	septoria spot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Alternaria citri</i>	alternaria rot
<i>Alternaria hesperidearum</i>	--
Moniliaceae	
<i>Aspergillus flavus</i>	aspergillus storage rot
<i>Aspergillus niger</i>	aspergillus rot
<i>Penicillium digitatum</i>	green mould
<i>Penicillium italicum</i>	blue mould
<i>Penicillium ulaiense</i>	penicillium mould
<i>Verticillium lecanii</i> [Animals Biosecurity]	--
Tuberculariales	
Tuberculariaceae	
<i>Fusarium culmorum</i>	dry rot
<i>Fusarium oxysporum</i>	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Trichothecium roseum</i>	pink rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora citricola</i>	brown rot of fruit
<i>Phytophthora citrophthora</i>	citrus brown rot
<i>Phytophthora hibernalis</i>	citrus brown rot
<i>Phytophthora nicotianae</i> var. <i>parasitica</i>	collar and root rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus stolonifer</i>	rhizopus soft rot
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas corrugata</i>	tomato pith necrosis
<i>Pseudomonas fluorescens</i>	pink eye

Pseudomonas syringae
Pseudomonas syringae pv. *syringae*

bacterial blast
bacterial soft rot

Virus

citrus enation - woody gall luteovirus	-
citrus exocortis viroid	-
citrus psorosis A	-
citrus psorosis B	-
citrus tristeza closterovirus [seedling yellows, decline, and stem pitting strains (except Hassuku dwarf, Capao Bonito, and Queensland and South African orange stem pitting strains)]	-
hop stunt viroid	-

Inspection, Testing and Treatment Requirements for *Poncirus**

ORGANISM TYPES	MAF ACCEPTABLE METHODS
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions).
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions).
Fungus	Country freedom OR growing season inspection for symptom expression.
Bacterium	
<i>Burkholderia cepacia</i>	Growing season inspection for symptom expression.
<i>Liberobacter africanum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Liberobacter asiaticum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Spiroplasma citri</i>	Country freedom/shoot tip grafting. Graft inoculated sweet orange, 27 to 32°C. Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot temperature (> 30°C) and incubate cultures at 32°C.
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xylella fastidiosa</i>	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
<i>Xylella fastidiosa</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus indicator.
Virus	
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures temperatures 18 to 25°C.
citrus infectious variegation ilarvirus	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus infectious variegation ilarvirus [crinkly leaf strain]	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus leaf rugose ilarvirus	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
citrus leathery leaf virus	Country freedom OR Rangpur lime. Grow indicators at cool temperatures 18 to 25°C.
citrus leprosis rhabdovirus	Country freedom OR graft inoculated sweet orange. Grow indicators at cool temperatures 18 to 25°C.
citrus mosaic virus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
citrus ringspot virus	Country freedom OR graft inoculated dweet tangor, sweet orange, mandarin (Parson's Special). Grow indicators at cool temperatures 18 to 25°C.
citrus tatter leaf capillovirus	Country freedom OR graft inoculated Rusk citrange, rough lemon, <i>Citrus excelsa</i> , citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza closterovirus [strains not in New Zealand]	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
citrus yellow mosaic badnavirus	Country freedom OR graft inoculated sweet orange, sour orange and citron.
citrus yellow mottle virus	Country freedom OR other suitable test.
Indian citrus mosaic badnavirus	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.
navel orange infectious mottling virus	Country freedom OR graft inoculated Satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.

ORGANISM TYPES	MAF ACCEPTABLE METHODS
satsuma dwarf nepovirus [Natsudaikai dwarf strain]	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
yellow vein clearing of lemon	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
Viroid	
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus viroids (groups I-IV)	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or mandarin (Parson's Special). Grow Citron at hot temperature 27 to 32°C.
Disease of unknown aetiology	
Australian citrus dieback	Country freedom OR other suitable test
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
bud union disease	Country freedom OR other suitable test
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years before releasing from quarantine.
citrus fatal yellows	Country freedom OR graft inoculated <i>Citrus macrophylla</i> .
citrus impietratura disease	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth indicators at cool temperatures 18 to 25°C.
citrus sunken vein disease	Country freedom OR other suitable test.
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
crisacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
kassala disease	Country freedom, cuttings collected from kassala free area.
lemon sieve tube necrosis	Country freedom OR other suitable test.
shell bark of lemons	Country freedom OR other suitable test.
zonate chlorosis	Country freedom, cuttings collected from kassala free area.
Phytoplasma	
<i>Candidatus</i> phytoplasma aurantifolia	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18 to 25°C.
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot temperature 27 to 32°C.

* Country freedom is accepted as equivalence to a treatment.

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. With prior notification, MAF will accept other internationally recognised testing methods.

Populus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Populus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA

Quarantine Pests: *Marssonina* spp.; Uredinales; *Xylella fastidiosa*; virus diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3

Minimum Period: 3 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Prunus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Prunus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Prunus* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

Prunus can be imported into Level 2 post entry quarantine from MAF-accredited facilities, or into Level 3 post entry quarantine from non-accredited facilities.

2. Pests of *Prunus*

Refer to the pest list.

3. Entry conditions for:

3.1 *Prunus* cuttings and tissue culture from offshore MAF-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. The operator of the accredited facility must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Prunus*. Refer to the “*Prunus* Inspection, Testing and Treatment Requirements”.

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Prunus* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Prunus* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MAF and the [name of the MAF-accredited facility].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

(iii) *Additional declarations to the phytosanitary certificate*

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only] and by providing the following additional declarations to the phytosanitary certificate:

"The *Prunus* cuttings have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MAF and the [name of the MAF-accredited facility].

AND

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

(iv) *Post-entry quarantine*

PEQ: All *Prunus* nursery stock must be imported under permit into post-entry quarantine in a level 2 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator.*

Quarantine Period and Inspection, Testing and Treatment Requirements: Upon arrival cuttings will be dipped in 1% sodium hypochlorite for 2 minutes [cuttings only]. The nursery stock will be grown for a minimum period of 9 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Nine months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Prunus* cuttings and tissue culture from non-accredited facilities in any country

(i) *Documentation*

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Prunus* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) *Phytosanitary requirements*

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Prunus* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) *Additional declarations to the phytosanitary certificate*

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only]. No additional declarations are required.

(iv) *Post-entry quarantine*

PEQ: All *Prunus* nursery stock must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator*.

Quarantine Period and Inspection, Testing and Treatment Requirements: Upon arrival cuttings will be dipped in 1% sodium hypochlorite for 2 minutes [cuttings only]. The nursery stock will be grown for a minimum period of 24 months in post-entry quarantine and will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Prunus*”, at the expense of the importer. Twenty four months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Prunus*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Bostrichidae

Apate monachus

black borer

Buprestidae

Chrysobothris mali

Pacific flatheaded borer

Sphenoptera dadkhani

flatheaded borer

Sphenoptera lafertei

flatheaded peach tree borer

Cerambycidae

Aeolesthes holosericea

cherry stem borer

Aeolesthes sarta

quetta borer

Chrysomelidae

Chaetocnema confinis

sweet potato flea beetle

Diabrotica speciosa

cucumber beetle

Monolepta australis

red-shouldered leaf beetle

Prasoidea sericea

leaf beetle

Curculionidae

Eremnus atratus

black weevil

Eremnus cerealis

western province grain worm

Eremnus setulosus

grey weevil

Naupactus xanthographus

fruit tree weevil

Orthorhinus cylindrirostris

elephant weevil

Otiorhynchus armadillo

weevil

Scolytidae

Scolytus japonicus

Japanese bark beetle

Scolytus mali

larger shot-hole borer

Scolytus rugulosus

shot-hole borer

Xyleborus dispar

ambrosia beetle

Xyleborus pfeili

bark beetle

Xyleborus rubricollis

black twig borer

Xyleborus xylographus

pin-hole borer

Xylosandrus crassiusculus

bark beetle

Diptera

Cecidomyiidae

Resseliella oculiperda

red bud borer

Muscidae

Atherigona orientalis

muscid fly

Syrphidae

Melanostoma agrolas

-

Tephritidae

Bactrocera cucurbitae

melon fly

Ceratitis capitata

Mediterranean fruit fly

Hemiptera

Coreidae

Amblypelta cocophaga

coconut nut fall bug

Amblypelta nitida

fruit-spotting bug

Leptoglossus occidentalis

coreid bug

Lygaeidae

Macchiademus diplopterus

grain chinch bug

Nysius vinitor

Rutherglen bug

Oxycarenus arctatus

coon bug

Oxycarenus exitiotus

fruit tree stinkbug

Miridae	
<i>Creontiades dilutus</i>	green mirid
<i>Lygus cerasi</i>	-
<i>Lygus elisus</i>	pale legume bug
<i>Lygus lineolaris</i>	tarnished plant bug
Pentatomidae	
<i>Acrosternum hilare</i>	green stink bug
<i>Antestiopsis orbitalis</i>	-
<i>Euschistus servus</i>	brown stink bug
<i>Tessaratoma papillosa</i>	litchee stink bug
Homoptera	
Aleyrodidae	
<i>Parabemisia myricae</i>	Japanese bayberry whitefly
Aphididae	
<i>Aphis spiraecola</i> [vector]	spirea aphid
<i>Brachycaudus amygdalinus</i>	short tailed almond aphid
<i>Brachycaudus cardui</i>	thistle aphid
<i>Brachycaudus schwartzi</i>	aphid
<i>Brachycaudus tragopogonis</i>	-
<i>Dysaphis plantaginea</i>	rosy apple aphid
<i>Hyalopterus amygdali</i>	peach aphid
<i>Hyalopterus pruni</i>	mealy plum aphid
<i>Hysteroneura setariae</i>	rusty plum aphid
<i>Myzus varians</i>	peach-potato aphid
<i>Pterochloroides persicae</i>	giant brown bark aphid
Asterolecaniidae	
<i>Asterolecanium pustulans</i>	oleander pit scale
Cicadellidae	
<i>Edwardsiana rosae</i>	rose leafhopper
Coccidae	
<i>Ceroplastes floridensis</i>	Florida wax scale
<i>Ceroplastes japonicus</i>	pink wax scale
<i>Ceroplastes rubens</i>	red wax scale
<i>Eulecanium prunosum</i>	frosted scale
<i>Parthenolecanium persicae</i>	European peach scale
<i>Pulvinaria innumerabilis</i>	cottony maple scale
<i>Sphaerolecanium prunastri</i>	globose scale
Diaspididae	
<i>Aonidiella citrina</i>	yellow scale
<i>Aonidiella orientalis</i>	oriental yellow scale
<i>Aspidiotus destructor</i>	coconut scale
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Chrysomphalus dictyospermi</i>	dictyospermum scale
<i>Diaspidiotus africanus</i>	grey scale
<i>Diaspidiotus ancyclus</i>	Putnam scale
<i>Epidiaspis leperii</i>	Italian pear scale
<i>Parlatoria oleae</i>	olive scale
<i>Pseudaulacaspis pentagona</i>	white peach scale
Flatidae	
<i>Metcalfa pruinosa</i>	planthopper
Margarodidae	
<i>Icerya seychellarum</i>	Seychelles scale
Membracidae	
<i>Ceresa alta</i>	-
<i>Ceresa bubalus</i>	buffalo tree hopper
<i>Stictocephala inermis</i>	-
Pseudococcidae	
<i>Maconellicoccus hirsutus</i>	pink hibiscus mealybug
<i>Pseudococcus maritimus</i>	grape mealybug

Hymenoptera	
Bethylidae	
<i>Goniozus</i> sp.	-
Eulophidae	
<i>Colpoclypeus florus</i>	-
Ichneumonidae	
<i>Phytodietus celcissimus</i>	-
Trichogrammatidae	
<i>Trichogrammatomyia tortricis</i>	-
Isoptera	
Kalotermitidae	
<i>Bifiditermes beesoni</i>	-
Rhinotermitidae	
<i>Coptotermes heimi</i>	-
<i>Heterotermes indicola</i>	-
Termitidae	
<i>Microtermes unicolor</i>	termite
<i>Odontotermes lokanandi</i>	termite
Lepidoptera	
Arctiidae	
<i>Hyphantria cunea</i>	fall webworm
Choreutidae	
<i>Choreutis pariana</i>	apple leaf skeletonizer
Cossidae	
<i>Cossus cossus</i>	goat moth
Gelechiidae	
<i>Anarsia lineatella</i>	peach twig borer
<i>Recurvaria nanella</i>	lesser bud moth
<i>Recurvaria syricitis</i>	bud moth
Geometridae	
<i>Alsophila pometaria</i>	fall cankerworm
<i>Operophtera brumata</i>	winter moth
Gracillariidae	
<i>Phyllonorycter cerasicolella</i>	leafminer
Lasiocampidae	
<i>Malacosoma californicum fragile</i>	tent caterpillar
<i>Malacosoma disstria</i>	forest tent caterpillar
Limacodidae	
<i>Doratifera vulnerans</i>	mottled cup moth
<i>Latoia latistriga</i>	plum slug
Lymantriidae	
<i>Orgyia antiqua</i>	rusty tussock moth
<i>Orgyia gonostigma</i>	vapourer moth
Metarbelidae	
<i>Indarbela quadrinotata</i>	wood-borer moth
Noctuidae	
<i>Alabama argillacea</i>	cotton leafworm
<i>Mamestra brassicae</i>	cabbage moth
<i>Peridroma saucia</i>	variegated cutworm
<i>Schizura concinna</i>	redhumped caterpillar
<i>Spodoptera frugiperda</i>	fall armyworm
<i>Xestia c-nigrum</i>	spotted cutworm
Notodontidae	
<i>Datana ministra</i>	yellow-necked caterpillar
Oecophoridae	
<i>Cryptophasa melanostigma</i>	fruit tree borer
<i>Maroga melanostigma</i>	fruit tree borer
Papilionidae	
<i>Papilio rutulus</i>	-
Pyralidae	

<i>Conogethes punctiferalis</i>	yellow peach moth
<i>Euzophera bigella</i>	quince moth
<i>Euzophera semifuneralis</i>	American plum borer
<i>Ostrinia nubilalis</i>	European corn borer
Saturniidae	
<i>Antheraea polyphemus</i>	emperor moth
Sesiidae	
<i>Synanthedon exitiosa</i>	peach tree borer
<i>Synanthedon pictipes</i>	lesser peach tree borer
Sphingidae	
<i>Sphinx drupiferarum</i>	plum sphinx
Tortricidae	
<i>Acleris minuta</i>	yellow headed fireworm
<i>Adoxophyes orana</i>	reticulated tortrix
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Archips oporanus</i>	fruit tree tortrix
<i>Archips podanus</i>	fruit tree tortrix
<i>Archips purpuranus</i>	-
<i>Archips rosanus</i>	rose leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Argyrotaenia ljugiana</i>	grey red-barred tortrix
<i>Argyrotaenia velutinana</i>	red-banded leafroller
<i>Choristoneura albaniana</i>	leafroller
<i>Choristoneura rosaceana</i>	oblique-banded leafroller
<i>Cryptoptila immersana</i>	ivy leafroller
<i>Cydia caryana</i>	hickory shuckworm
<i>Cydia packardi</i>	cherry fruitworm
<i>Cydia prunivora</i>	lesser appleworm
<i>Epichoristodes acerbella</i>	South African carnation worm
<i>Hedya dimidioalba</i>	green budworm
<i>Pandemis cerasana</i>	barred fruit tree tortrix
<i>Pandemis heparana</i>	dark fruit tree tortrix
<i>Platynota flavedana</i>	apple bud moth
<i>Platynota idaeusalis</i>	tufted apple bud moth
<i>Proeulia auraria</i>	grapevine leafroller
<i>Proeulia chrysopteris</i>	grapevine leaf-rolling tortricid
<i>Sparganothis reticulatana</i>	leafroller
<i>Spilonota ocellana</i>	eyespotted bud moth
<i>Tortrix capensana</i>	tortricid moth
<i>Tortrix cinderella</i>	-
Orthoptera	
Acrididae	
<i>Acanthacris ruficornis</i>	-
<i>Phymateus leprosus</i>	bush locust
Thysanoptera	
Thripidae	
<i>Frankliniella tritici</i>	eastern flower thrips
<i>Taeniothrips meridionalis</i>	thrips
<i>Thrips angusticeps</i>	cabbage thrips
<i>Thrips flavus</i>	flower thrips
Mite	
Arachnida	
Acarina	
Acaridae	
<i>Caloglyphus haripuriensis</i>	acarid mite
Eriophyidae	
<i>Acalitus phloecoptes</i>	plum bud gall mite
<i>Aceria chinensis</i>	-
<i>Aculus fockeui</i> [vector]	eriophyid mite

<i>Cenopalpus lanceolatisetae</i>	-
<i>Cenopalpus pulcher</i>	flat scarlet mite
<i>Eptrimerus pyri</i>	pear leaf blister mite
<i>Eriophyes armeniacus</i>	-
<i>Eriophyes catacardiae</i>	-
<i>Eriophyes emarginatae</i>	eriophyid mite
<i>Eriophyes inaequalis</i>	eriophyid mite
<i>Eriophyes padi</i>	eriophyid mite
<i>Eriophyes similis</i>	eriophyid mite
<i>Phytoptus insidiosus</i>	pineapple fruit mite
Tarsonemidae	
<i>Tarsonemus pruni</i>	tarsonemid mite
<i>Tarsonemus randsi</i>	-
<i>Tarsonemus smithi</i>	tarsonemid mite
Tenuipalpidae	
<i>Rhinotergum schestovici</i>	mite
<i>Tenuipalpus persicae</i>	false spider mite
<i>Tenuipalpus taonicus</i>	false spider mite
Tetranychidae	
<i>Aplonobia citri</i>	Japanese citrus rust mite
<i>Bryobia rubrioculus</i> f. sp. <i>prunicola</i>	brown mite
<i>Eotetranychus boreus</i>	apricot spider mite
<i>Eotetranychus carpini</i>	tetranychid mite
<i>Eotetranychus carpini borealis</i>	yellow spider mite
<i>Eotetranychus pruni</i>	hickory scorch mite
<i>Eotetranychus uncatas</i>	Lewis spider mite
<i>Eutetranychus africanus</i>	African red spider mite
<i>Eutetranychus enodes</i>	tetranychid mite
<i>Eutetranychus orientalis</i>	pear leaf blister mite
<i>Oligonychus gossypii</i>	tetranychid mite
<i>Oligonychus mangiferus</i>	mango spider mite
<i>Tetranychus canadensis</i>	fourspotted spider mite
<i>Tetranychus kanzawai</i>	kanzawa mite
<i>Tetranychus neocaledonicus</i>	Mexican spider mite
<i>Tetranychus pacificus</i>	Pacific spider mite
<i>Tetranychus viennensis</i>	twospotted mite
Nematode	
Secernentea	
Tylenchida	
Pratylenchidae	
<i>Pratylenchus brachyurus</i>	root lesion nematode
Fungus	
Ascomycota	
Calosphaeriales	
Calosphaeriaceae	
<i>Calosphaeria pulchella</i>	--
Diaporthales	
Valsaceae	
<i>Apiognomonium erythrostroma</i>	--
<i>Diaporthe decorticans</i>	-
<i>Diaporthe pennsylvanica</i>	-
<i>Diaporthe pruni</i>	-
<i>Leucostoma cincta</i> (anamorph <i>Cytospora cincta</i>)	canker
Dothideales	
Botryosphaeriaceae	
<i>Auerswaldiella puccinioides</i>	-
Mycosphaerellaceae	
<i>Mycosphaerella cerasella</i> (anamorph <i>Cercospora</i>)	leaf spot

<i>circumscissa</i>	
<i>Mycosphaerella nigerristigma</i>	-
<i>Mycosphaerella pruni-persicae</i> (anamorph <i>Miuraea persica</i>)	frosty mildew
Schizothyriaceae	
<i>Schizothyrium pomi</i> (anamorph <i>Zygophiala jamaicensis</i>)	fly speck
Zopfiaceae	
<i>Caryospora putaminum</i>	--
unknown Dothideales	
<i>Apiosporina morbosus</i>	black knot
Erysiphales	
Erysiphaceae	
<i>Sphaerotheca armeniaca</i>	--
Leotiales	
Dermateaceae	
<i>Blumeriella jaapii</i> (anamorph <i>Phloeosporella padi</i>)	shot-hole
<i>Dermea cerasi</i> (anamorph <i>Foveostroma drupacearum</i>)	--
Sclerotiniaceae	
<i>Grovesinia pyramidalis</i> (anamorph <i>Cristulariella moricola</i>)	target spot
<i>Lambertella jasmini</i>	rot
<i>Lambertella pruni</i>	fruit rot
<i>Monilinia fructigena</i> (anamorph <i>Monilia fructigena</i>)	European brown rot
<i>Monilinia kusanoi</i>	leaf blight
<i>Monilinia seaveri</i>	twig blight
Phyllachorales	
Phyllachoraceae	
<i>Polystigma rubrum</i>	--
<i>Polystigma ussuriensis</i>	--
Taphrinales	
Taphrinaceae	
<i>Taphrina armeniaca</i>	witches' broom
<i>Taphrina communis</i>	bladder fruit
<i>Taphrina confusa</i>	--
<i>Taphrina flectans</i>	-
<i>Taphrina pruni-subcordatae</i>	--
Xylariales	
Xylariaceae	
<i>Xylaria longiana</i>	--
<i>Xylaria mali</i>	black root rot
unknown Ascomycota	
Hyponectriaceae	
<i>Physalospora perseae</i>	peach blister canker
Basidiomycota: Basidiomycetes	
Agaricales	
Strophariaceae	
<i>Pholiota squarrosa</i>	wood decay
Tricholomataceae	
<i>Armillaria bulbosa</i>	armillaria root rot
<i>Armillaria heimii</i>	-
<i>Armillaria luteobubalina</i>	armillaria root rot
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i>)	armillaria root rot
<i>Armillaria ostoyae</i>	armillaria root rot
<i>Armillaria tabescens</i>	armillaria root rot
Ganodermatales	
Ganodermataceae	
<i>Ganoderma brownii</i>	wood decay
<i>Ganoderma lobatum</i>	white soft decay
<i>Ganoderma lucidum</i> (anamorph <i>Polyporus lucidus</i>)	wood rot
<i>Ganoderma zonatum</i>	butt and stem rot
Hericiales	
Gloeocystidiellaceae	

<i>Gloeocystidiellum porosum</i>	--
<i>Laxitextum bicolor</i>	white rot
Hymenochaetales	
Hymenochaetaceae	
<i>Phellinus igniarius</i>	-
<i>Phellinus pomaceus</i>	white heart rot
<i>Phellinus prunicola</i>	-
Poriales	
Coriolaceae	
<i>Coriopsis gallica</i>	white rot
<i>Fomes fomentarius</i>	wood decay
<i>Fomitopsis cajanderi</i>	wood decay
<i>Fomitopsis meliae</i>	wood decay
<i>Fomitopsis pinicola</i>	brown cubical rot
<i>Fomitopsis rosea</i>	brown pocket rot
<i>Fomitopsis spraguei</i>	butt rot
<i>Gloeophyllum sepiarium</i>	brown rot
<i>Gloeophyllum trabeum</i>	brown rot
<i>Heterobasidion annosum</i> (anamorph <i>Spiniger meineckellum</i>)	wood rot
<i>Laetiporus sulphureus</i> (anamorph <i>Sporotrichum versisporum</i>)	brown cubical rot
<i>Oxyporus latemarginatus</i>	wood rot
<i>Trametes velutina</i>	dieback
<i>Trichaptum bifforme</i>	white rot
<i>Tyromyces chioneus</i>	white rot
<i>Tyromyces tephroleucus</i>	-
Polyporaceae	
<i>Polyporus squamosus</i>	wood rot
Stereales	
Corticiaceae	
<i>Phanerochaete arizonica</i>	white rot
<i>Phanerochaete crassa</i>	white rot
Cyphellaceae	
<i>Maireina marginata</i>	wood decay
Hyphodermataceae	
<i>Schizopora paradoxa</i>	wood rot
Sistotremataceae	
<i>Phymatotrichopsis omnivora</i>	Texas root rot
Steccherinaceae	
<i>Irpex lacteus</i>	wood rot
Stereaceae	
<i>Stereum strigoso-zonatum</i>	silver leaf
Thelephorales	
Thelephoraceae	
<i>Corticium koleroga</i>	web blight
Basidiomycota: Teliomycetes	
Uredinales	
Uropyxidaceae	
<i>Tranzschelia pruni-spinosae</i>	leaf rust
unknown Uredinales	
<i>Leucotelium pruni-persicae</i>	leucotelium white rust
Zygomycota: Zygomycetes	
Mucorales	
Gilbertellaceae	
<i>Gilbertella persicaria</i>	fruit rot
Mucoraceae	
<i>Rhizopus circinans</i>	--
mitosporic fungi	
unknown mitosporic fungi	
unknown mitosporic fungi	
<i>Catenophora pruni</i>	--

<i>Fumago vagans</i>	--
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Coniothyrium amygdali</i>	--
<i>Coniothyrium prunicolum</i>	coniothyrium disease
<i>Cytospora persicae</i>	--
<i>Diplodia pruni</i>	--
<i>Diplodia vulgaris</i>	--
<i>Diplodina persicae</i>	--
<i>Natrassia mangiferae</i>	stem-end rot
<i>Phoma persicae</i>	leaf spot
<i>Phomopsis cinerascens</i>	fig canker
<i>Phomopsis perseae</i>	fruit rot
<i>Phyllosticta congesta</i>	phyllosticta rot
<i>Phyllosticta laurocerasi</i>	leaf spot
<i>Phyllosticta persicae</i>	target leaf spot
<i>Phyllosticta serotina</i>	-
<i>Phyllosticta virginiana</i>	--
<i>Septoria pruni</i>	--
unknown Coelomycetes	
unknown Coelomycetes	
<i>Asteromella mali</i>	--
<i>Cylindrosporium nuttallii</i>	-
<i>Gloeosporium laeticolor</i>	anthracnose
<i>Melanconium cerasinum</i>	-
<i>Pestalotia laurocerasi</i>	leaf spot
<i>Rhodosticta quercina</i>	peach canker
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria mali</i>	alternaria blotch
<i>Cercospora effusa</i>	-
<i>Cercospora rubrotincta</i>	leaf spot
<i>Clasterosporium degenerans</i>	--
<i>Mycocentrospora cladosporioides</i>	fruit spot
<i>Phialophora parasitica</i>	stem dieback
Moniliaceae	
<i>Monilia angustior</i>	rot
<i>Monilia implicata</i>	rot
unknown Hyphomycetes	
unknown Hyphomycetes	
<i>Aureobasidium prunicola</i>	fruit rot
<i>Candida inconspicua</i>	sour pit
unknown fungi	
unknown fungi	
unknown fungi	
<i>Morrisographium persicae</i>	--
Bacterium	
Bacillaceae	
<i>Bacillus mesentericus vulgatus</i>	-
Pseudomonadaceae	
<i>Pseudomonas amygdali</i>	-
<i>Pseudomonas syringae</i> pv. <i>cerasicola</i>	bacterial gall
<i>Pseudomonas syringae</i> pv. <i>morsprunorum</i>	bacterial canker
Spiroplasmataceae	
<i>Spiroplasma citri</i>	citrus stubborn
Xanthomonadaceae	
<i>Xylella fastidiosa</i>	Pierce's disease

Virus

<i>American plum line pattern virus</i>	-
<i>Apple stem grooving virus</i> [Prunus-infecting strain]	-
<i>Apricot deformation mosaic virus</i>	-
<i>Apricot latent virus</i>	-
<i>Carnation Italian ringspot virus</i>	-
<i>Cherry Hungarian rasp leaf virus</i>	-
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	-
<i>Cherry line pattern and leaf curl virus</i>	-
<i>Liittle cherry virus 1</i>	-
<i>Liittle cherry virus 2</i>	-
<i>Liittle cherry virus 3</i>	-
<i>Cherry mottle leaf virus</i>	-
<i>Cherry rasp leaf virus</i> [strains not in New Zealand]	-
<i>Cherry rosette disease associated virus</i>	-
<i>Cherry rough fruit virus</i>	-
<i>Cherry rusty mottle virus</i>	-
<i>Cherry twisted leaf virus</i>	-
<i>Cherry virus A</i>	-
<i>Epirus cherry virus</i>	-
<i>Myrobalan latent ringspot virus</i>	-
<i>Peach enation virus</i>	-
<i>Peach mosaic virus</i>	-
<i>Peach rosette mosaic virus</i>	-
<i>Peach violet mosaic virus</i>	-
<i>Peach yellow leaf virus</i>	-
<i>Petunia asteroid mosaic virus</i>	-
<i>Plum bark necrosis stem pitting-associated virus</i>	-
<i>Plum pox virus</i>	-
<i>Prunus virus S</i>	-
<i>Raspberry ringspot virus</i>	-
<i>Sowbane mosaic virus</i>	-
<i>Stocky prune virus</i>	-
<i>Tomato black ring virus</i>	-
<i>Tomato bushy stunt virus</i>	-
<i>Tomato ringspot virus</i> [strains not in New Zealand]	-

Viroid

<i>Hop stunt viroid</i>	-
<i>Peach latent mosaic viroid</i>	-

Phytoplasma

<i>Apricot chlorotic leafroll phytoplasma</i>	-
<i>Apricot decline phytoplasma</i>	-
<i>Apricot witches broom phytoplasma</i>	-
<i>Cherry albino phytoplasma</i>	-
<i>Cherry blossom anomaly</i>	-
<i>Cherry lethal yellows</i>	-
<i>Cherry Moliere disease phytoplasma</i>	-
<i>Cherry western X anomaly</i>	-
<i>European stone fruit yellows phytoplasma</i>	-
<i>Peach decline phytoplasma</i>	-
<i>Peach red suture phytoplasma</i>	-
<i>Peach rosette phytoplasma</i>	-
<i>Peach vein clearing phytoplasma</i>	-
<i>Peach X-disease phytoplasma</i>	-
<i>Peach yellow leafroll phytoplasma</i>	-
<i>Peach yellows phytoplasma</i>	-

Plum chlorotic leaf roll phytoplasma -

Disease of unknown aetiology

Amasya cherry disease agent -
Apricot fruit blotch -
Apricot necrotic leaf roll -
Apricot pucker leaf agent -
Apricot vein necrosis agent -
Apricot yellow line pattern -
Apricot yellow mosaic -
Asteroid spot -
Cherry (sweet) mora -
Cherry Lambert mottle -
Cherry black canker agent -
Cherry chlorotic rusty spot agent -
Cherry decline agent -
Cherry freckle fruit agent -
Cherry fruit necrosis -
Cherry midleaf necrosis -
Cherry mottling agent -
Cherry necrotic crook agent -
Cherry necrotic mottle leaf agent -
Cherry pseudo leafroll -
Cherry rough bark agent -
Cherry short stem agent -
Cherry sickle leaf -
Cherry spur cherry agent -
Cherry stem pitting agent -
Cherry stunt -
Cherry vein-clearing rosette -
Cherry white spot -
Cherry xylem aberration agent -
Peach Mexican spot agent -
Peach asteroid mosaic -
Peach bark and wood grooving agent -
Peach blotch agent -
Peach chlorosis agent -
Peach gummosis agent -
Peach leaf necrosis agent -
Peach leaf roll -
Peach mottle agent -
Peach oil blotch agent -
Peach pseudo stunt agent -
Peach purple mosaic agent -
Peach red marbling agent -
Peach seedling necrosis -
Peach sooty ringspot agent -
Peach star mosaic agent -
Peach stubby twig agent -
Peach wart agent -
Peach weak peach -
Peach willow leaf rosette -
Peach yellow mosaic agent -
Plum chlorosis and wilt -
Plum diamond canker -
Plum enation mottle -
Plum leaf roll -
Plum ochre mosaic agent -
Plum ringspot and shot hole -
Plum white spot -

Prune diamond canker agent	-
Shirofugen stunt agent	-
Sour cherry (Montmorency) bark splitting agent	-
Sour cherry pink fruit agent	-
Sour cherry rusty splitting agent	-
Sour cherry vein yellow spot	-
Utah dixie rusty mottle	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Cerambycidae

Oemona hirta

lemon tree borer

Chrysomelidae

Eucolaspis brunnea

bronze beetle

Curculionidae

Asynonychus cervinus

Fuller's rose weevil
weevil

Irenimus parilis

banded fruit weevil

Phlyctinus callosus

Nitidulidae

Carpophilus davidsoni

dried fruit beetle

Carpophilus hemipterus

dried fruit beetle

Carpophilus mutilatus

dried fruit beetle

Scarabaeidae

Costelytra zealandica

grass grub

Dermaptera

Forficulidae

Forficula auricularia

European earwig

Hemiptera

Pentatomidae

Nezara viridula

green vegetable bug

Homoptera

Aphididae

Aphis gossypii

cotton aphid

Aphis pomi

apple aphid

Aphis spiraecola

spirea aphid

Brachycaudus helichrysi

leafcurl plum aphid

Brachycaudus persicae

black peach aphid

Eriosoma lanigerum

woolly apple aphid

Macrosiphum euphorbiae

potato aphid

Myzus cerasi

black cherry aphid

Myzus persicae

green peach aphid

Rhopalosiphum nymphaeae

waterlily aphid

Rhopalosiphum padi

bird cherry-oat aphid

Cercopidae

Philaenus spumarius

meadow spittlebug

Coccidae

Ceroplastes destructor

white wax scale

Coccus hesperidum

brown soft scale

Parthenolecanium corni

European fruit scale

Saissetia coffeae

hemispherical scale

Saissetia oleae

black scale

Diaspididae

Aonidiella aurantii

California red scale

Aspidiotus nerii

oleander scale

Diaspidiotus perniciosus

San Jose scale

Lepidosaphes novozealandica

scale

Lepidosaphes ulmi

oyster shell scale

Lindingaspis rossi

Ross' black scale

Lopholeucaspis japonica

pear white scale

Parlatoria pergandii

chaff scale

Eriococcidae

Eriococcus coriaceus

gum tree scale

Margarodidae

<i>Icerya purchasi</i>	cottony cushion scale
Pseudococcidae	
<i>Pseudococcus calceolariae</i>	citrophilus mealybug
<i>Pseudococcus longispinus</i>	longtailed mealybug
<i>Pseudococcus viburni</i>	obscure mealybug
Ricaniidae	
<i>Scolytopa australis</i>	passionvine hopper
Hymenoptera	
Tenthredinidae	
<i>Caliroa cerasi</i>	pear sawfly
Lepidoptera	
Gracillariidae	
<i>Phyllonorycter messaniella</i>	leafminer
Hepialidae	
<i>Aenetus virescens</i>	puriri moth
Noctuidae	
<i>Agrotis ipsilon</i>	greasy cutworm
<i>Helicoverpa armigera</i>	tomato fruitworm
<i>Helicoverpa armigera conferta</i>	tomato fruitworm
Saturniidae	
<i>Antheraea eucalypti</i>	gum emperor moth
Tortricidae	
<i>Ctenopseustis obliquana</i>	brownheaded leafroller
<i>Cydia molesta</i>	oriental fruit moth
<i>Cydia pomonella</i>	codling moth
<i>Epiphyas postvittana</i>	light brown apple moth
<i>Harmologa oblongana</i>	leafroller
<i>Planotortrix excessana</i>	greenheaded leafroller
<i>Tortrix flavescens</i>	-
Orthoptera	
Tettigoniidae	
<i>Caedicia simplex</i>	katydid
Thysanoptera	
Thripidae	
<i>Frankliniella intonsa</i>	eastern flower thrips
<i>Frankliniella occidentalis</i>	western flower thrips
<i>Heliothrips haemorrhoidalis</i>	greenhouse thrips
<i>Thrips obscuratus</i>	New Zealand flower thrips
Mite	
Arachnida	
Acarina	
Acaridae	
<i>Tyrophagus putrescentiae</i>	mould mite
Diptilomiopidae	
<i>Diptacus gigantorhynchus</i>	big-beaked plum mite
Eriophyidae	
<i>Aculus cornutus</i>	peach silver mite
<i>Aculus fockeui</i>	eriphyid mite
<i>Eriophyes pyri</i>	pear leaf blister mite
<i>Phyllocoptes abaenus</i>	apricot-russeting mite
Tarsonemidae	
<i>Tarsonemus waitei</i>	peach bud mite
Tenuipalpidae	
<i>Brevipalpus californicus</i>	bunch mite
<i>Brevipalpus obovatus</i>	privet mite
<i>Brevipalpus phoenicis</i>	passionvine mite
Tetranychidae	
<i>Bryobia rubrioculus</i>	bryobia mite
<i>Bryobia rubrioculus redikorzevi</i>	brown fruit mite

<i>Eotetranychus sexmaculatus</i>	sixspotted mite
<i>Panonychus citri</i>	citrus red mite
<i>Panonychus ulmi</i>	European red mite
<i>Tetranychus cinnabarinus</i>	carmine spider mite
<i>Tetranychus lambi</i>	strawberry spider mite
<i>Tetranychus turkestanii</i>	strawberry spider mite
<i>Tetranychus urticae</i>	twospotted spider mite
Nematode	
Adenophorea	
Dorylaimida	
Trichodoridae	
<i>Paratrichodorus porosus</i>	-
Secernentea	
Tylenchida	
Pratylenchidae	
<i>Pratylenchus penetrans</i>	root lesion nematode
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
<i>Diaporthe eres</i> (anamorph <i>Phomopsis oblonga</i>)	canker
<i>Diaporthe perniciosa</i> (anamorph <i>Phomopsis mali</i>)	canker
<i>Leucostoma persoonii</i> (anamorph <i>Cytospora leucostoma</i>)	valsa dieback
<i>Valsa ambiens</i> (anamorph <i>Cytospora leucosperma</i>)	twig dieback
<i>Valsa ceratophora</i> (anamorph <i>Cytospora sacculus</i>)	valsa canker
Diatrypales	
Diatrypaceae	
<i>Diatrype stigma</i>	leaf spot
<i>Eutypa lata</i>	eutypa dieback
Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria dothidea</i> (anamorph <i>Fusicoccum aesculi</i>)	canker
<i>Botryosphaeria obtusa</i> (anamorph <i>Sphaeropsis malorum</i>)	blight
<i>Botryosphaeria rhodina</i> (anamorph <i>Lasiodiplodia theobromae</i>)	gummosis
<i>Botryosphaeria stevensii</i> (anamorph <i>Diplodia mutila</i>)	botryosphaeria canker
Leptosphaeriaceae	
<i>Leptosphaeria coniothyrium</i> (anamorph <i>Coniothyrium fuckelii</i>)	common canker
Mycosphaerellaceae	
<i>Mycosphaerella tassiana</i> (anamorph <i>Cladosporium herbarum</i>)	black leaf spot
Venturiaceae	
<i>Venturia carpophila</i> (anamorph <i>Cladosporium carpophilum</i>)	scab
<i>Venturia cerasi</i>	scab
Erysiphales	
Erysiphaceae	
<i>Phyllactinia guttata</i>	powdery mildew
<i>Podosphaera clandestina</i>	powdery mildew
<i>Podosphaera leucotricha</i>	powdery mildew
<i>Podosphaera tridactyla</i> (anamorph <i>Oidium passerinii</i>)	powdery mildew
<i>Sphaerotheca pannosa</i> (anamorph <i>Oidium leucoconium</i>)	powdery mildew
Hypocreales	
Hypocreaceae	
<i>Bionectria ochroleuca</i> (anamorph <i>Gliocladium roseum</i>)	fusarium rot
<i>Calonectria kyotensis</i> (anamorph <i>Cylindrocladium scoparium</i>)	root and stem rot
<i>Gibberella avenacea</i> (anamorph <i>Fusarium avenaceum</i>)	fusarium stem canker
<i>Gibberella baccata</i> (anamorph <i>Fusarium lateritium</i>)	fusarium rot
<i>Gibberella pulicaris</i> (anamorph <i>Fusarium sambucinum</i>)	Fusarium rot
<i>Gibberella zeae</i> (anamorph <i>Fusarium graminearum</i>)	headblight of maize
<i>Hypocrea ceramica</i> (anamorph <i>Trichoderma koningii</i>)	trichoderma rot

<i>Nectria cinnabarina</i> (anamorph <i>Tubercularia vulgaris</i>)	coral spot
<i>Nectria galligena</i> (anamorph <i>Cylindrocarpon mali</i>)	European canker
<i>Nectria haematococca</i> (anamorph <i>Fusarium solani</i>)	fusarium fruit rot
<i>Nectria radicola</i> (anamorph <i>Cylindrocarpon destructans</i>)	rot
Leotiales	
Dermateaceae	
<i>Diplocaupon mespili</i> (anamorph <i>Entomosporium mespili</i>)	black spot
Sclerotiniaceae	
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould
<i>Monilinia fructicola</i>	American brown rot
<i>Monilinia laxa</i> (anamorph <i>Monilia laxa</i>)	European brown rot
<i>Sclerotinia sclerotiorum</i>	cottony rot
Microascales	
unknown Microascales	
<i>Ceratocystis fimbriata</i>	canker
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	anthracnose
Saccharomycetales	
Dipodascaceae	
<i>Dipodascus geotrichum</i> (anamorph <i>Geotrichum candidum</i>)	sour rot
Taphrinales	
Taphrinaceae	
<i>Taphrina deformans</i>	leaf curl
<i>Taphrina mume</i>	--
<i>Taphrina pruni</i>	leaf blister
<i>Taphrina wiesneri</i>	leaf blister
Xylariales	
Xylariaceae	
<i>Rosellinia necatrix</i> (anamorph <i>Dematophora necatrix</i>)	white root rot
Basidiomycota: Basidiomycetes	
Agaricales	
Agaricaceae	
<i>Collybia druceae</i>	mushroom rot
Aphylophorales	
unknown Aphylophorales	
<i>Byssomerulius corium</i>	--
Cantharellales	
Hydnaceae	
<i>Steccherinum ochraceum</i>	sapwood rot
Ceratobasidiales	
Ceratobasidiaceae	
<i>Thanatephorus cucumeris</i> (anamorph <i>Rhizoctonia solani</i>)	rhizoctonia rot
Ganodermatales	
Ganodermataceae	
<i>Ganoderma applanatum</i>	white rot
<i>Ganoderma australe</i>	white heart rot
Hymenochaetales	
Hymenochaetaceae	
<i>Phellinus gilvus</i>	wood rot
<i>Phellinus robustus</i>	black measles
Poriales	
Coriolaceae	
<i>Antrodia albida</i>	wood decay
<i>Pycnoporus coccineus</i>	branch canker
<i>Trametes hirsuta</i>	wood decay
<i>Trametes versicolor</i>	white rot
Schizophyllales	
Schizophyllaceae	

<i>Schizophyllum commune</i>	agaric stem rot
Stereales	
Atheliaceae	
<i>Athelia rolfsii</i> (anamorph <i>Sclerotium rolfsii</i>)	Rolf's disease
Corticaceae	
<i>Corticium utriculicum</i>	root rot
Meruliaceae	
<i>Chondrostereum purpureum</i>	silver leaf
Stereaceae	
<i>Amylostereum sacratum</i>	sirex fungus
<i>Stereum hirsutum</i>	black measles
Basidiomycota: Teliomycetes	
Uredinales	
Uropyxidaceae	
<i>Tranzschelia discolor</i>	rust
Basidiomycota: Ustomycetes	
Platyglloeales	
Platyglloeaceae	
<i>Helicobasidium purpureum</i> (anamorph <i>Rhizoctonia crocorum</i>)	violet root rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora cactorum</i>	phytophthora crown and root rot
<i>Phytophthora cambivora</i>	-
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
<i>Phytophthora citricola</i>	brown rot of fruit
<i>Phytophthora citrophthora</i>	citrus brown rot
<i>Phytophthora cryptogea</i>	pink rot
<i>Phytophthora drechsleri</i>	-
<i>Phytophthora megasperma</i>	pink rot
<i>Phytophthora nicotianae</i>	buckeye rot
<i>Phytophthora syringae</i>	navel end brown rot
<i>Pythium irregulare</i>	pythium root and stem rot
<i>Pythium ultimum</i>	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Mucor piriformis</i>	mucor fruit rot
<i>Rhizopus oryzae</i>	wet rot
<i>Rhizopus stolonifer</i>	rhizopus soft rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Leptostromataceae	
<i>Gloeodes pomigena</i>	sooty blotch
Sphaerioidaceae	
<i>Botryosphaeria ribis</i> (anamorph <i>Dothiorella ribis</i>)	canker
<i>Fusicoccum amygdali</i>	constriction canker
<i>Macrophomina phaseolina</i>	ashy stem blight
<i>Phoma fimeti</i>	--
<i>Phoma pomorum</i>	phoma fruit and leaf spot
<i>Phyllosticta circumscissa</i>	leaf spot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum acutatum</i>	anthracnose
<i>Pestalotiopsis adusta</i>	leaf spot
<i>Pestalotiopsis versicolor</i>	pestalotiopsis rot
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot

<i>Alternaria citri</i>	alternaria rot
<i>Alternaria panax</i>	-
<i>Alternaria tenuissima</i>	alternaria mould
<i>Cladosporium cladosporioides</i>	cladosporium leaf spot
Moniliaceae	
<i>Aspergillus flavus</i>	aspergillus storage rot
<i>Aspergillus niger</i>	aspergillus rot
<i>Penicillium expansum</i>	blue mould rot
<i>Penicillium funiculosum</i>	fruitlet core rot
<i>Penicillium italicum</i>	blue mould
<i>Verticillium albo-atrum</i>	verticillium wilt
<i>Verticillium dahliae</i>	verticillium wilt
<i>Verticillium nigrescens</i>	verticillium wilt
Tuberculariales	
Tuberculariaceae	
<i>Fusarium oxysporum</i>	leaf spot
unknown Hyphomycetes	
unknown Hyphomycetes	
<i>Stigmina carpophila</i>	shot-hole
<i>Trichothecium roseum</i>	pink rot
Bacterium	
Enterobacteriaceae	
<i>Erwinia amylovora</i>	fire-blight
<i>Erwinia carotovora</i> subsp. <i>carotovora</i>	bacterial soft rot
Pseudomonadaceae	
<i>Pseudomonas cichorii</i>	bacterial leaf spot
<i>Pseudomonas fluorescens</i>	pink eye
<i>Pseudomonas marginalis</i> pv. <i>marginalis</i>	leaf spot
<i>Pseudomonas syringae</i> pv. <i>persicae</i>	bacterial canker
<i>Pseudomonas syringae</i> pv. <i>syringae</i>	bacterial soft rot
<i>Pseudomonas viridiflava</i>	leaf blight
<i>Xanthomonas arboricola</i> pv. <i>pruni</i>	-
<i>Xanthomonas campestris</i> pv. <i>pruni</i>	bacterial spot
Rhizobiaceae	
<i>Rhizobium radiobacter</i>	crown gall
Virus	
<i>Apple chlorotic leaf spot virus</i>	-
<i>Apple mosaic virus</i>	-
<i>Cherry (sour) green ring mottle virus</i>	-
<i>Cherry leaf roll virus</i> [red raspberry strain]	-
<i>Cherry necrotic rusty mottle virus</i>	-
<i>Cherry rasp leaf virus</i> [American strain]	-
<i>Cucumber mosaic virus</i>	-
<i>Prune dwarf virus</i>	-
<i>Prunus necrotic ringspot virus</i>	-
<i>Strawberry latent ringspot virus</i>	-
<i>Tobacco mosaic virus</i>	-
<i>Tobacco necrosis virus</i>	-
<i>Tobacco ringspot virus</i>	-
<i>Tomato ringspot virus</i> [Grape yellow vein strain]	-
Disease of unknown aetiology	
Apricot chlorotic leaf mottle agent	-
Apricot moorpark mottle agent	-
Apricot stone pitting agent	-
Cherry rusty spot agent	-
Peach calico agent	-
Peach chlorotic spot agent	-

Peach seedling chlorosis agent	-
Peach yellow mottle agent	-
Plum fruit crinkle agent	-
Plum mosaic	-
Plum mottle leaf agent	-

Inspection, Testing and Treatment Requirements for *Prunus*

ORGANISM TYPES	MAF-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND one of the approved insecticide treatments (Refer to “Approved Treatments for <i>Prunus</i> ”)
Mite	Visual inspection AND one of the approved miticide treatments (Refer to “Approved Treatments for <i>Prunus</i> ”)
Fungi	Growing season inspection in PEQ for disease symptom expression AND plating on potato dextrose agar.
Bacterium	
<i>Bacillus mesentericus vulgatus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Pseudomonas amygdali</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Pseudomonas syringae</i> pv. <i>cerasicola</i>	Growing season inspection in PEQ for disease symptom expression AND plating on King’s B medium.
<i>Pseudomonas syringae</i> pv. <i>morsprunorum</i>	Growing season inspection in PEQ for disease symptom expression AND plating on King’s B medium.
<i>Spiroplasma citri</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for disease symptom expression AND PCR (Minsavage <i>et al.</i> , 1994).
Virus	
<i>American plum line pattern virus</i>	ELISA or PCR AND herbaceous indicators <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana occidentalis</i> AND TEM.
<i>Apple stem grooving virus</i> [<i>Prunus</i> -infecting strain]	ELISA or PCR AND herbaceous indicator <i>Chenopodium quinoa</i> AND TEM.
<i>Apricot deformation mosaic virus</i>	Woody indicators AND TEM.
<i>Apricot latent virus</i>	TEM.
<i>Carnation Italian ringspot virus</i>	TEM.
<i>Cherry Hungarian rasp leaf virus</i>	TEM.
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	Woody indicators AND ELISA or PCR AND herbaceous indicators <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana benthamiana</i> AND TEM.
<i>Cherry line pattern and leaf curl virus</i>	Woody indicators AND TEM.
<i>Cherry mottle leaf virus</i>	Woody indicators AND ELISA or PCR AND herbaceous indicator <i>Chenopodium quinoa</i> AND TEM.
<i>Cherry rasp leaf virus</i> [strains not in New Zealand]	Woody indicators AND herbaceous indicators <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana benthamiana</i> AND TEM.
<i>Cherry rosette disease associated virus</i>	Woody indicators AND TEM.
<i>Cherry rough fruit virus</i>	TEM.
<i>Cherry rusty mottle virus</i>	Woody indicators AND TEM.
<i>Cherry twisted leaf virus</i>	Woody indicators AND herbaceous indicator <i>Nicotiana occidentalis</i> AND TEM.
<i>Cherry virus A</i>	TEM.
<i>Epirus cherry virus</i>	Woody indicators AND herbaceous indicators <i>Chenopodium</i>

	<i>quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana benthamiana</i> AND TEM.
<i>Little cherry virus 1</i>	Woody indicators AND TEM.
<i>Little cherry virus 2</i>	Woody indicators AND TEM.
<i>Little cherry virus 3</i>	Woody indicators AND TEM.
<i>Myrobalan latent ringspot virus</i>	Woody indicators AND herbaceous indicators <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana benthamiana</i> AND TEM.
<i>Peach enation virus</i>	Woody indicators AND herbaceous indicator <i>Chenopodium quinoa</i> AND TEM.
<i>Peach mosaic virus</i>	Woody indicators AND herbaceous indicator <i>Chenopodium quinoa</i> AND TEM.
<i>Peach rosette mosaic virus</i>	Woody indicators AND ELISA or PCR AND herbaceous indicators <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana benthamiana</i> AND TEM.
<i>Peach violet mosaic virus</i>	TEM.
<i>Peach yellow leaf virus</i>	TEM.
<i>Petunia asteroid mosaic virus</i>	Woody indicators AND TEM.
<i>Plum bark necrosis stem pitting-associated virus</i>	Woody indicators AND TEM.
<i>Plum pox virus</i>	Woody indicators AND ELISA or PCR (two sets) AND herbaceous indicator <i>Nicotiana benthamiana</i> AND TEM.
<i>Prunus virus S</i>	TEM.
<i>Raspberry ringspot virus</i>	Woody indicators AND herbaceous indicators <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana benthamiana</i> AND TEM.
<i>Sowbane mosaic virus</i>	Herbaceous indicator <i>Chenopodium quinoa</i> AND TEM.
<i>Stocky prune virus</i>	TEM.
<i>Tomato black ring virus</i>	ELISA or PCR AND herbaceous indicators <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i> AND TEM.
<i>Tomato bushy stunt virus</i>	ELISA or PCR AND herbaceous indicators <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana benthamiana</i> AND TEM.
<i>Tomato ringspot virus</i> [strains not in New Zealand]	Woody indicators AND ELISA or PCR AND herbaceous indicators <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana benthamiana</i> AND TEM.
Viroid	
<i>Hop stunt viroid</i>	Hybridization or PAGE or PCR.
<i>Peach latent mosaic viroid</i>	Woody indicators AND Hybridization or PAGE or PCR.
Phytoplasmas	Nested PCR using the universal phytoplasma fU5/rU3 (Lorenz <i>et al.</i> 1995) and R16F2n/R16R2 primers (Gundersen <i>et al.</i> 1996).
Diseases of unknown aetiology	Woody indicators AND growing season inspection in PEQ for disease symptom expression.

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. Transmission electron microscopy (TEM); in the spring, leaves from grafted cuttings must be observed under the electron microscope for virus particles.
3. Herbaceous indexing: At least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season's growth from grafted cuttings in the spring. Plants shall be sampled from at least two positions on every plant

including a young, fully expanded leaf at the top of each plant and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.

4. Woody indexing:

Woody indicator	<i>Prunus armeniaca</i>	<i>Prunus avium</i> & <i>Prunus cerasus</i>	<i>Prunus domestica</i> & <i>Prunus salicina</i>	<i>Prunus dulcis</i>	All other <i>Prunus</i> spp.
<i>Prunus armeniaca</i> cv. Moorpark	x3				
<i>Prunus armeniaca</i> cv. Tilton	x3				x3
<i>Prunus avium</i> cv. Bing		x3			
<i>Prunus avium</i> cv. Sam		x3			x3
<i>Prunus domestica</i> cv. Shiroplum		x3	x3		x3
<i>Prunus persica</i> cv. Elberta or GF305	x4	x4	x4	x4	x4
Total indicators	10	13	7	4	13

At least three plants (four plants for *Prunus persica* cv. Elberta or GF305) of each woody indicator must be used in each test. All woody indicators are to be inoculated by double budding. Inoculations are to be carried out using the dormant, imported cuttings during winter. The inoculated woody indicator plants must be inspected for symptoms of pathogen infection for at least 9 months.

5. Molecular tests for viroids. Tests are to be carried out on dormant, grafted cuttings during the winter after importation.
6. Polymerase chain reaction (PCR) tests for phytoplasmas. Tests are to be carried out on two occasions, firstly using the imported dormant cuttings during winter and secondly using the new season's growth from grafted cuttings during the following summer.
7. Enzyme linked immunosorbent assay (ELISA) and PCR tests for viruses. Tests are to be carried out using the new season's growth from grafted cuttings in the spring. Plants shall be sampled from at least two positions on every plant including a young, fully expanded leaflet at the top of each stem and an older leaflet from a midway position.
8. All PCR, ELISA and hybridization tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
9. Inspect *Prunus* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
10. With prior notification, MAF will accept other internationally recognised testing methods.

References

- Gundersen, D.E., Lee, I.M. 1996. Ultrasensitive detection of phytoplasmas by nested-PCR assays using two universal primer pairs. *Phytopathologia Mediterranea* 35: 144-151.
- Lorenz, K.H., Scheider, B., Ahrens, U., Seemuller, E. 1995. Detection of the Apple proliferation and Pear decline phytoplasmas by PCR Amplification of ribosomal and nonribosomal DNA. *Phytopathology* 85: 771-776.
- Minsavage G.V., Thompson C.M., Hopkins D.L., Leite R.M.V.B.C., Stall R.E., 1994. Development of a PCR protocol for detection of *Xylella fastidiosa* in plant tissue. *Phytopathology* 84: 456-461.

Pseudotsuga

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Pseudotsuga*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Bursaphelenchus* spp.; *Lophodermium* spp.; Uredinales; *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3

Minimum Period: 6 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Pyrus

Scientific name

Commodity Sub-class

Date Issued

Pyrus communis

Cuttings (dormant)

12 June 1998

Quercus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Quercus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: *Ceratocystis fagacearum*; *Cryphonectria parasitica*; *Cronatium quercuum*; *Phytophthora ramorum*; *Xylella fastidiosa*

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3

Minimum Period: 3 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Ranunculus

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Ranunculus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard. These conditions do not apply to *Ranunculus arvensis*, *Ranunculus repens* and *Ranunculus sardous*, for which there is currently no import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Phymatotrichopsis omnivora*; Virus diseases

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom:

OPTION 1:

No import permit is required.

PEQ: None

Additional Declaration(s):

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from the USA:

No import permit is required unless the bulbs require post-entry quarantine.

PEQ: None or Level 2 (see below)

Additional Declaration(s):

1. "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests".

2. "The dormant tubers have been sourced from a “Pest free area”, free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a “Pest free place of production”, free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

D. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

PEQ: Level 1 or Level 2 (see below)

Minimum Period: 3 months

Additional Declaration(s):

1. "The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

2. "The dormant tubers have been sourced from a “Pest free area”, free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a “Pest free place of production”, free from *Phymatotrichopsis omnivora*".

AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

E. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."

Rhododendron

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Rhododendron*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Microsphaera* spp.; *Ovulinia azaleae*; *Phytophthora ramorum*; Uredinales

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from Australia, Canada, Israel and South Africa (these commodities may only be imported from these countries)::

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

1. "The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum*".

2. "*Microsphaera* spp., and the following rust diseases are not known to occur on *Rhododendron* spp. in _____ (the country or state where the plants were grown) _____".

Aecidium rhododendri; *Aecidium sinorhododendri*; *Chrysomyxa ledi*; *Chrysomyxa ledicola*; *Chrysomyxa dieteli*; *Chrysomyxa expansa*; *Chrysomyxa himalensis*; *Chrysomyxa komarovii*; *Chrysomyxa piperiana*; *Chrysomyxa roanensis*; *Chrysomyxa succinea*; *Chrysomyxa taghishae*

Puccinia rhododendri; *Pucciniastrum vaccinii*

OR

a) All visible flower buds are to be removed prior to export; and

b) On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at a MAF-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Ribes

Scientific name	Commodity Sub-class	Date Issued
<i>Ribes nigrum</i>	Whole Plants	19 June 1998
<i>Ribes uva-crispa</i>	Whole Plants	19 June 1998

Rosa

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Rosa*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard. These conditions do not apply to *Rosa gymnocarpa*, for which there is currently no import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Quarantine Pests: Uredinales; *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

Additional Declaration(s):

1. "The plants have been dipped in propiconazole at the rate of 5g a.i. per 10 litres of water".
2. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Cuttings (dormant):

PEQ: Level 1

Minimum Period: 6 months

Additional Declaration(s):

"The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

C. For Tissue Cultures:

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

Rubus

Scientific name	Commodity Sub-class	Date Issued
<i>Rubus x loganobaccus</i>	Rooted Cuttings /Whole Plants	19 June 1998

Salix

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Salix*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Erwinia salicis*, *Melampsora* spp., *Phytophthora ramorum*; *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3

Minimum Period: 3 months

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MAF-registered laboratory at the importers expense, prior to release to the importer.

Sandersonia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Sandersonia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Sandersonia* nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

2. Pests of *Sandersonia*

Refer to the pest list.

3. Entry conditions for:

3.1 *Sandersonia* dormant bulbs from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Sandersonia* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following certification.

(iii) Additional declarations to the phytosanitary certificate

No additional declarations are required.

3.2 *Sandersonia* plants in tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Sandersonia* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

(iv) *Additional declarations to the phytosanitary certificate*

No additional declarations are required.

Pest List for *Sandersonia*

REGULATED PESTS (actionable)

There are no regulated pests known to be associated with the commodity

NON-REGULATED PESTS(non-actionable)

Mite

Arachnida

Acarina

Histiomidae

Histiostoma feroniarum

damp mite

Fungus

Ascomycota

Hypocreales

Hypocreaceae

Gibberella acuminata (anamorph *Fusarium acuminatum*)

fusarium storage rot

Gibberella avenacea (anamorph *Fusarium avenaceum*)

fusarium stem canker

Gibberella zeae (anamorph *Fusarium graminearum*)

headblight of maize

Nectria haematococca (anamorph *Fusarium solani*)

fusarium fruit rot

Nectria radicularis (anamorph *Cylindrocarpon destructans*)

rot

Leotiales

Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)

grey mould

Saccharomycetales

Dipodascaceae

Dipodascus geotrichum (anamorph *Geotrichum candidum*)

sour rot

Basidiomycota: Basidiomycetes

Ceratobasidiales

Ceratobasidiaceae

Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)

rhizoctonia rot

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*)

Rolf's disease

mitosporic fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Phoma exigua

phoma rot

Pyrenochaeta terrestris

pink root rot

mitosporic fungi (Hyphomycetes)

Tuberculariales

Tuberculariaceae

Fusarium culmorum

dry rot

Fusarium oxysporum

leaf spot

Fusarium sacchari

decline

Bacterium

Enterobacteriaceae

Pectobacterium carotovorum

bacterial soft rot

Virus

Cucumber mosaic virus

-

Solanum tuberosum

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Solanum tuberosum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Solanum tuberosum* nursery stock approved for entry into New Zealand Plants in tissue culture

Solanum tuberosum can be imported into New Zealand as plants in tissue culture from any country.

2. Pests of *Solanum tuberosum*

Refer to the pest list.

3. Entry conditions for:

3.1 *Solanum tuberosum* plants in tissue culture from any country

(i) Documentation

Import permit is required

Declaration for genetically modified organisms is required: Refer to section 5 for details.

Phytosanitary certificate: a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Solanum tuberosum* plants in tissue culture exported to New Zealand.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

The exporting country NPPO must be satisfied that the requirements of the model phytosanitary certificate have been met before the phytosanitary certificate is issued.

(iv) Additional declarations to the phytosanitary certificate

There are no additional declarations to the phytosanitary certificate.

(v) Inspection, testing and treatments of the consignment

Upon arrival, the inspection, treatment and testing requirements for specified pests must be undertaken at a New Zealand Level 3 MAF-accredited facility. Refer to *Solanum tuberosum* Inspection and Testing Requirements following the *Solanum tuberosum* pest list.

(vi) Post-entry quarantine

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pests. 6 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected or additional treatments/testing are required.

4. Validation of test results and audit of treatments at MAF-accredited laboratories or facilities

For all imported *Solanum tuberosum* plants in tissue culture, MAF reserves the right to validate all testing and audit all treatment processes that are undertaken by a facility accredited by MAF for testing/treatment purposes. This applies to MAF-accredited facilities offshore and within New Zealand. Audits will be conducted on a regular basis and at the expense of the importer.

5. Declaration for genetically modified organisms

All import permit applications must include a signed declaration that the *Solanum tuberosum* plants in tissue culture are not genetically modified organisms, as defined by the New Zealand Hazardous Substances and New Organisms Act 1996 (HSNO Act, 1996).

For a copy of the declaration form refer to the end of this schedule.

Pest List for *Solanum tuberosum*

REGULATED PESTS (actionable)

Mite

Arachnida

Acarina

Tetranychidae

Tetranychus evansi

tetranychid mite

Fungi

Chytridiomycota

Chytridiales

Synchytriaceae

Synchytrium endobioticum [official control]

potato wart

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Phoma andigena var. *andina*

phoma leaf spot

Mitosporic Fungi

Unknown Mitosporic Fungi

Unknown Mitosporic Fungi

Aecidium cantensis

deforming rust

Oomycota

Pythiales

Pythiaceae

Phytophthora infestans [A2 mating strain]

late blight

Bacteria

Corynebacteriaceae

Clavibacter michiganensis subsp. *sepedonicus*

potato ring rot

Enterobacteriaceae

Erwinia carotovora subsp. *betavasculorum*

bacterial sudden yellows death

Erwinia chrysanthemi pv. *chrysanthemi*

bacterial soft rot

Erwinia chrysanthemi pv. *paradisiaca*

-

Erwinia chrysanthemi pv. *parthenii*

-

Viroids

*Columnea latent viroid**

-

Potato spindle tuber viroid [transient]

-

*Tomato chlorotic dwarf viroid**

-

*Tomato planta macho viroid**

-

Viruses

*Abutilon mosaic begomovirus**

-

*Arracacha A nepovirus**

-

Arracacha B nepovirus

-

*Asparagus 3 potexvirus**

-

Beet curly top curtovirus

-

*Cassava green mottle nepovirus**

-

*Cassia mild mosaic carlavirus**

-

*Eggplant mosaic tymovirus**

-

Eggplant mottled dwarf nucleorhabdovirus

-

*Henbane mosaic potyvirus**

-

*Melilotus mosaic potyvirus**

-

*Pelargonium line pattern carmovirus**

-

*Pepino mosaic potexvirus**

-

*Pepper veinal mottle potyvirus**

-

<i>Potato 14R tobamovirus</i>	-
<i>Potato Andean latent tymovirus</i>	-
<i>Potato Andean mottle comovirus</i>	-
<i>Potato black ringspot nepovirus</i>	-
<i>Potato deforming mosaic begomovirus</i>	-
<i>Potato latent carlavirus</i>	-
<i>Potato mop-top furovirus</i>	-
<i>Potato P carlavirus</i>	-
<i>Potato rough dwarf carlavirus</i>	-
<i>Potato T trichovirus</i>	-
<i>Potato U nepovirus</i>	-
<i>Potato V potyvirus</i>	-
<i>Potato Y potyvirus</i> [strains not in New Zealand]	-
<i>Potato yellow dwarf nucleorhabdovirus</i>	-
<i>Potato yellow mosaic begomovirus</i>	-
<i>Potato yellow vein crinivirus</i>	-
<i>Potato yellowing alfamovirus</i>	-
<i>Solanum apical leaf curling begomovirus</i>	-
<i>Solanum yellows luteovirus</i>	-
<i>Southern potato latent carlavirus</i>	-
<i>Sowbane mosaic sobemovirus</i>	-
<i>Tobacco etch potyvirus*</i>	-
<i>Tobacco necrosis necrovirus</i> [strains not in New Zealand]	-
<i>Tobacco necrotic dwarf luteovirus*</i>	-
<i>Tobacco rattle tobnavirus</i> [strains not in New Zealand]	-
<i>Tobacco streak ilarvirus</i> [strains not in New Zealand]	-
<i>Tobacco stunt varicosavirus*</i>	-
<i>Tomato black ring nepovirus</i>	-
<i>Tomato bushy stunt tombusvirus*</i>	-
<i>Tomato infectious chlorosis crinivirus</i>	-
<i>Tomato leaf curl begomovirus - Australia*</i>	-
<i>Tomato leaf curl begomovirus - New Delhi</i>	-
<i>Tomato top necrosis nepovirus*</i>	-
<i>Tomato yellow leaf curl begomovirus</i>	-
<i>Tomato yellow mosaic begomovirus</i>	-
<i>Tomato yellow vein streak begomovirus*</i>	-
<i>Wild potato mosaic potyvirus</i>	-

Phytoplasmas

Eggplant little leaf phytoplasma	-
Peanut witches' broom*	-
Potato marginal flavescence	-
Potato phyllody phytoplasma	-
Potato purple-top roll phytoplasma	-
Potato purple-top wilt phytoplasma	-
Potato round leaf phytoplasma	-
Potato stolbur phytoplasma	-
Potato witches' broom phytoplasma	-
Saq'O disease	-

Note: * Pathogens that infect *Solanum tuberosum* experimentally (i.e. not yet found to infect potato naturally under field conditions).

NON-REGULATED PESTS (non-actionable)

Fungi

Ascomycota

Erysiphales

Erysiphaceae

Erysiphe cichoracearum (anamorph *Oidium asteris-punice*) powdery mildew

Ascomycota

Hypocreales

Hypocreaceae

Gibberella avenacea (anamorph *Fusarium avenaceum*) Fusarium stem canker

Basidiomycota: Basidiomycetes

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*) Rolf's disease

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Phoma destructiva bulb rot

Phoma exigua var. *exigua* gangrene

Phoma foveata gangrene

Septoria lycopersici leaf spot

Unknown Coelomycetes

Unknown Coelomycetes

Colletotrichum coccodes Anthracnose

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales

Dematiaceae

Alternaria alternata black stalk rot

Alternaria solani leaf spot

Ulocladium atrum foliage spot

Moniliaceae

Verticillium albo-atrum verticillium wilt

Verticillium dahliae verticillium wilt

Verticillium nigrescens verticillium wilt

Verticillium tricorpus verticillium wilt

Tuberculariales

Tuberculariaceae

Fusarium oxysporum leaf spot

Fusarium solani f. sp. *eumartii* -

Oomycota

Pythiales

Pythiaceae

Phytophthora infestans [A1 mating strain] late blight

Bacteria

Corynebacteriaceae

Clavibacter michiganensis subsp. *michiganensis* bacterial canker

Enterobacteriaceae

Erwinia carotovora subsp. *atroseptica* bacterial soft rot

Erwinia carotovora subsp. *carotovora* bacterial soft rot

Erwinia chrysanthemi pv. *dieffenbachii* -

Pseudomonadaceae

Pseudomonas syringae pv. *syringae* bacterial soft rot

Ralstonia solanacearum (Race 1) bacterial wilt

Ralstonia solanacearum (Race 3) bacterial wilt

Xanthomonas vesicatoria bacterial spot

Rhizobiaceae

Agrobacterium rhizogenes
Agrobacterium tumefaciens

hairy root
crown gall

Viruses

<i>Alfalfa mosaic alfamovirus</i>	-
<i>Cucumber mosaic cucumovirus</i>	-
<i>Potato A potyvirus</i>	-
<i>Potato M carlavirus</i>	-
<i>Potato S carlavirus</i>	-
<i>Potato X potexvirus</i>	-
<i>Potato Y potyvirus</i> [C, N and O strains]	-
<i>Potato aucuba mosaic potexvirus</i>	-
<i>Potato leafroll luteovirus</i>	-
<i>Tobacco mosaic tobamovirus</i>	-
<i>Tobacco necrosis necrovirus</i> [A strain]	-
<i>Tobacco rattle tobavirus</i> [Paeonia and Narcissus infecting strains]	-
<i>Tobacco ringspot nepovirus</i>	-
<i>Tobacco streak ilarvirus</i> [Black raspberry latent strain]	-
<i>Tomato mosaic tobamovirus</i>	-
<i>Tomato spotted wilt tospovirus</i>	-

Inspection and Testing Requirements for MAF-accredited facilities, for *Solanum tuberosum*

ORGANISM TYPES	ACCEPTABLE METHODS (See Note 6 at the end of this table).	Comments
Mites	Binocular microscope inspection.	
Fungi		
<i>Aecidium cantensis</i>	Growing season inspection in PEQ for symptom expression.	
<i>Phoma andigena</i> var. <i>andina</i>	Growing season inspection in PEQ for symptom expression.	
<i>Phytophthora infestans</i> (A2 mating strain)	Growing season inspection in PEQ for symptom expression.	
<i>Synchytrium endobioticum</i> [official control]	Growing season inspection in PEQ for symptom expression.	<i>S. endobioticum</i> cannot be cultured. It is identified by microscopic examination of affected plants. This organism belongs to the Myxomycetes in the Kingdom Protozoa.
Bacteria		
<i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i>	Growing season inspection in PEQ for symptom expression AND Immunofluorescence (monoclonal antibody, clone 9A1, Agdia) OR ELISA AND grow plantlets on Murashige and Skoog medium (see note 18) OR PCR (Patrik 2000) AND grow plantlets on Murashige and Skoog medium (see note 18).	
<i>Erwinia carotovora</i> subsp. <i>betavasculorum</i>	Growing season inspection in PEQ for symptom expression AND plating on selective pectate media e.g. crystal violet pectate medium.	Possible synonym <i>Pectobacterium betavasculorum</i> (Gardan <i>et al.</i> , 2003). The taxonomy is in dispute. These testing methods will only detect to the species level. Further identification required for subspecies.
<i>Erwinia chrysanthemi</i> pv. <i>chrysanthemi</i>	Growing season inspection in PEQ for symptom expression AND plating on selective pectate media.	These testing methods will only detect to the species level. Further identification required for subspecies.
<i>Erwinia chrysanthemi</i> pv. <i>paradisiaca</i>	Growing season inspection in PEQ for symptom expression AND plating on selective pectate media.	These testing methods will only detect to the species level. Further identification required for subspecies.
<i>Erwinia chrysanthemi</i> pv. <i>parthenii</i>	Growing season inspection in PEQ for symptom expression AND plating on selective pectate media.	These testing methods will only detect to the species level. Further identification required for subspecies.

Viroid		
Potato spindle tuber viroid [transient]	PCR using two sets of primers (e.g. Shamloul <i>et al.</i> 1997 and Nakahara <i>et al.</i> 1999) OR Return PAGE (with silver staining) OR Hybridisation (P32 or digoxigenin labelled RNA probes).	
Viruses		
Arracacha B nepovirus	ELISA AND herbaceous indicators Ca (4 plants) AND TEM.	Sap transmitted with difficulty. ELISA must detect the oca strain
Beet curly top curtovirus	PCR using primers of Rojas <i>et al.</i> 1993 AND TEM.	Cannot be transmitted by sap inoculation
Eggplant mottled dwarf nucleorhabdovirus	Herbaceous indicators Nb, Nc, Nd AND TEM.	
Potato 14R tobamovirus	Growing season inspection in PEQ for symptom expression.	Not fully characterised.
Potato Andean latent tymovirus	ELISA AND herbaceous indicators Nb, No AND TEM.	
Potato Andean mottle comovirus	ELISA AND herbaceous indicators Nc, Nd AND TEM.	
Potato black ringspot nepovirus	ELISA AND herbaceous indicators Cq, No AND TEM.	
Potato deforming mosaic begomovirus	PCR using universal primers of Rojas <i>et al.</i> (1993) or Wyatt and Brown (1996) OR the universal ELISA for begomoviruses (Agdia) AND TEM.	Virus not transmitted by sap inoculation.
Potato latent carlavirus	PCR using universal primers for carlavirus (Badge <i>et al.</i> 1996) AND TEM.	The use of indicator plants is unreliable.
Potato mop-top furovirus	ELISA AND herbaceous indicators Ca, Cq, Nd AND TEM.	ELISA can be used to detect the virus in indicator plants but may not be reliable for potato in which virus is usually in low concentration or erratically distributed.
Potato P carlavirus	PCR using universal primers for carlavirus (Badge <i>et al.</i> 1996) AND TEM.	Infected indicator plants do not produce symptoms.
Potato rough dwarf carlavirus	PCR using universal primers for carlavirus (Badge <i>et al.</i> 1996) AND TEM.	Sap inoculation of indicator plants is unreliable.
Potato T trichovirus	Herbaceous indicators Ca, Cq AND ELISA AND TEM.	
Potato U nepovirus	Herbaceous indicators Ca, Cq AND TEM.	Transmitted by sap with difficulty.
Potato V potyvirus	General potyvirus ELISA or PCR using universal potyvirus primers (Langeveld <i>et al.</i> 1991 or Pappu <i>et al.</i> 1993 or Gibbs & Mackenzie 1997) AND TEM.	

Potato Y potyvirus [strains not in NZ]	General potyvirus ELISA or PCR using universal potyvirus primers (Langeveld <i>et al.</i> 1991 or Pappu <i>et al.</i> 1993 or Gibbs & Mackenzie 1997) AND herbaceous indicators Nb, No AND TEM.	
Potato yellow dwarf nucleorhabdovirus	Herbaceous indicators Nc (4 plants) AND TEM.	
Potato yellow mosaic begomovirus	Herbaceous indicators Nb, Nt AND TEM.	
Potato yellow vein crinivirus	PCR or hybridisation according to Salazar <i>et al.</i> 2000 AND TEM.	Crinivirus cannot be transmitted by sap inoculation.
Potato yellowing alfamovirus	ELISA AND TEM.	Transmission may be unreliable by sap inoculation.
Solanum apical leaf curling begomovirus	Growing season inspection in PEQ for symptom expression.	Cannot be transmitted by sap inoculation. Tentative species in begomovirus genus
Solanum yellows luteovirus	Growing season inspection in PEQ for symptom expression.	
Southern potato latent ?carlavirus	Growing season inspection in PEQ for symptom expression.	Tentative member of carlavirus family.
Sowbane mosaic sobemovirus	Herbaceous indicators Cq, Ca AND TEM.	
Tobacco necrosis necrovirus [strains not in New Zealand]	Herbaceous indicators Ca, Cq, Nc AND TEM.	Tobacco necrosis virus A Tobacco necrosis virus B
Tobacco rattle tobnavirus [strains not in New Zealand]	PCR AND herbaceous indicators Ca, Nc AND TEM.	Serological detection is unreliable because of diversity in the particle proteins of different isolates.
Tobacco streak ilarvirus [strains not in New Zealand]	Herbaceous indicators Nt (4 plants) AND TEM.	Potato strain SB10 infects potato naturally.
Tomato black ring nepovirus	ELISA AND herbaceous indicators Ca, Cq, Nc AND TEM.	Considerable antigenic variation therefore use mixture of antibodies to the two main serotypes – potato bouquet and pseudo aucuba strains and the beet ringspot strain.
Tomato infectious chlorosis crinivirus	PCR using method of Li <i>et al.</i> (1998) AND TEM.	Cannot be transmitted by sap inoculation.
Tomato leaf curl begomovirus –New Delhi	Herbaceous indicators Nb (4 plants) AND TEM.	Potato leaf curl is a new disease in northern India caused by a strain of Tomato leaf curl new Delhi virus. A rare example of a sap-transmissible begomovirus
Tomato yellow leaf curl begomovirus	PCR using universal primers of Rojas <i>et al.</i> (1993) or Wyatt and Brown (1996) OR the universal ELISA for begomoviruses (Agdia) AND TEM.	Transmitted poorly by sap inoculation.
Tomato yellow mosaic begomovirus	PCR using universal primers of Rojas <i>et al.</i> (1993) or Wyatt and Brown (1996) OR the universal ELISA for begomoviruses (Agdia) AND herbaceous indicators Nb, Nt AND TEM.	
Wild potato mosaic potyvirus	Herbaceous indicators Nc, No AND TEM.	

Phytoplasmas		
Eggplant little leaf phytoplasma	PCR using the universal phytoplasma primers fU5/rU3 (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 (Gundersen <i>et al.</i> 1996).	
Potato marginal flavescence	PCR using the universal phytoplasma primers fU5/rU3 (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 (Gundersen <i>et al.</i> 1996).	
Potato phyllody phytoplasma	PCR using the universal phytoplasma primers fU5/rU3 (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 (Gundersen <i>et al.</i> 1996).	
Potato purple-top roll phytoplasma	PCR using the universal phytoplasma primers fU5/rU3 (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 (Gundersen <i>et al.</i> 1996).	
Potato purple-top wilt phytoplasma	PCR using the universal phytoplasma primers fU5/rU3 (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 (Gundersen <i>et al.</i> 1996).	
Potato round leaf phytoplasma	PCR using the universal phytoplasma primers fU5/rU3 (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 (Gundersen <i>et al.</i> 1996).	
Potato stolbur phytoplasma	PCR using the universal phytoplasma primers fU5/rU3 (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 (Gundersen <i>et al.</i> 1996).	
Potato witches' broom phytoplasma	PCR using the universal phytoplasma primers fU5/rU3 (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 (Gundersen <i>et al.</i> 1996).	
Saq'O disease	Growing season inspection in PEQ for symptom expression.	An unknown phytoplasma and a native strain of PLRV are associated with this disease. No appropriate detection methods are currently available for the disease-causing agent.

Viroids, viruses and phytoplasmas infecting potato experimentally

Note: * Pathogens that are currently only known to infect *Solanum tuberosum* experimentally. Tests that would detect these pathogens are already being conducted elsewhere in this schedule.

Columnnea latent viroid*	No evidence that this viroid infects potato naturally.	
Tomato chlorotic dwarf viroid*	Tests that would detect this viroid are already being conducted elsewhere in this schedule e.g. the herbaceous indicator Nd.	
Tomato planta macho viroid*	No evidence that this viroid infects potato naturally (Galindo <i>et al.</i> 1982).	

Abutilon mosaic begomovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule e.g. the universal PCR or ELISA tests for begomoviruses.	
Arracacha A nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the herbaceous indicators Cq and Nc.	
Asparagus 3 potexvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Cq and Nc.	
Cassava green mottle nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the herbaceous indicators Cq and Nc.	
Cassia mild mosaic carlavirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the universal PCR for carlaviruses.	
Eggplant mosaic tymovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Nc.	
Henbane mosaic potyvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the general potyvirus ELISA or PCR using universal potyvirus primers (Langeveld <i>et al.</i> 1991 or Pappu <i>et al.</i> 1993 or Gibbs & Mackenzie 1997).	
Melilotus mosaic potyvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Ca	
Pelargonium line pattern carmovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Ca.	
Pepino mosaic potexvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Nc.	
Pepper veinal mottle potyvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Nc and Ca and the general potyvirus PCR/ELISA.	
Tobacco etch potyvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Ca.	
Tobacco necrotic dwarf luteovirus*	No appropriate test available.	
Tobacco stunt varicosavirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Ca.	
Tomato bushy stunt tomosvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Nc.	

Tomato leaf curl begomovirus - Australia*	Tests that would detect this virus are already being conducted elsewhere in this schedule e.g. the universal PCR or ELISA for begomovirus.	
Tomato top necrosis nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Cq.	
Tomato yellow vein streak begomovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the universal PCR or ELISA for begomovirus.	
Peanut witches' broom*	Tests that would detect this phytoplasma are already being conducted elsewhere in this schedule, e.g. the universal PCR for phytoplasma.	

Notes:

1. Transmission electron microscopy (TEM) – each plant must be observed under the TEM for virus particles.
2. Indicator hosts: *Chenopodium amaranticolor* (Ca), *C. quinoa* (Cq), *Nicotiana benthamiana* (Nb), *N. clevelandii* (Nc), *N. debneyii* (Nd), *N. occidentalis* P1 (No) and *N. tabacum* (cv White Burley) (Nt).
3. Enzyme linked immunosorbent assay (ELISA).
4. Polymerase chain reaction (PCR).
5. Polyacrylamide gel electrophoresis (PAGE).
6. With prior notification, MAF will accept other internationally recognised testing methods.
7. For bioassay and ELISA, plants must be sampled from at least two positions on every stem including a young, fully expanded leaflet at the top of each stem and an older leaflet from a midway position (Jeffries, 1998).
8. For the PSTVd PCR young actively growing leaf tissue must be used.
9. Indicator plants must be grown at an appropriate temperature prior to inoculation.
10. Indicator plants must be shaded for 12-24 hrs prior to inoculation.
11. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks.
12. Inspect potato plants at least once per week for signs of pest and disease.
13. Inspect inoculated herbaceous indicator plants at least twice per week for symptoms of virus infection.
14. The unit for testing is an individual plantlet. Each single plantlet must be labelled individually and tested separately. Progeny derived from these units after arrival can be treated as equivalent.
15. PCR, hybridisation tests and ELISA need to be validated using positive controls/reference material prior to use in quarantine testing.
16. At least two plants of each indicator species stated must be used in mechanical inoculation tests, unless otherwise stated.
17. Plantlets in growth media must be de-flasked and grown in quarantine for virus disease testing.
18. *Clavibacter michiganensis* subsp. *sepedonicus* grows well in microplants on Murashige and Skoog media. However there are usually no symptoms in this phase even though there could be high populations of bacteria, after potting up symptoms develop quickly (Dr D. Stead, Central Science Laboratory (York, UK), pers. comm. 2002).
19. After plantlets are deflasked they must be grown in sterile potting mix.
20. Testing must be carried out on plants while they are still in active growth and before tubers form.
21. For the general potyvirus ELISA, it is important to check that the potyvirus to be tested for is detected by the antisera being used. Agdia state that their general potyvirus ELISA will detect all aphid- transmitted potyviruses.
22. *Erwinia carotovora* ssp. *carotovora*, *E. carotovora* ssp. *atroseptica* and *E. chrysanthemi* have recently been classified in the genus *Pectobacterium* as *P. ssp. carotovorum*, *P. carotovorum* ssp. *atrosepticum* and *P. chrysanthemi* (Hauben *et al.*, 1998; cited in Perombelon 2002).
23. Only plants grown in tissue culture will be released from quarantine.
24. Positive and negative controls must be used in ELISA.
25. Positive and negative controls (including a blank water control) must be used in PCR. Ideally internal positive controls and a negative plant control must also be used.

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Appendix 1. Quarantine Tests for Potato Viruses and Viroid

(★ = accepted test, sp = specific ELISA, u = universal primers or ELISA)

Grey background = not easily mechanically transmissible.

Virus	PCR	ELISA	TEM	Ca	Cq	Nb	Nc	Nd	No	Nt
Arracacha B nepovirus		★ sp	★	★ 4 plants						
Beet curly top curtovirus	★ u		★							
Eggplant mottled dwarf nucleorhabdovirus			★			★	★	★		
Potato Andean latent tymovirus		★ sp	★			★			★	
Potato Andean mottle comovirus		★ sp	★				★	★		
Potato black ringspot nepovirus		★ sp	★		★				★	
Potato deforming mosaic begomovirus	★ u	★ u	★							
Potato latent carlavirus	★ u	★								
Potato mop top furovirus		★ sp	★	★	★			★		
Potato P carlavirus	★ u		★							
Potato rough dwarf carlavirus	★ u		★							
Potato spindle tuber viroid [transient]	★ sp or PAGE or hybridisation									
Potato T trichovirus		★ sp	★	★	★					
Potato U nepovirus			★	★	★					
Potato V potyvirus	★ u	★ u	★							
Potato Y potyvirus [strains not in New Zealand]	★ u	★ u	★			★			★	
Potato yellow dwarf nucleorhabdovirus			★				★ 4 plants			
Potato yellow mosaic begomovirus			★			★				★
Potato yellow vein crinivirus	★ sp or hybridisation		★							
Potato yellowing alfamovirus		★ sp	★							
Sowbane mosaic sobemovirus			★	★	★					
Tobacco necrosis necrovirus [strains not in New Zealand]			★	★	★		★			
Tobacco rattle tobnavirus [strains not in New Zealand]	★ sp		★	★			★			
Tobacco streak ilarvirus [strains not in New Zealand]			★							★ 4 plants
Tomato black ring nepovirus		★ sp	★	★	★		★			
Tomato infectious chlorosis crinivirus	★ sp		★							
Tomato leaf curl begomovirus -New Delhi			★			★ 4 plants				
Tomato yellow leaf curl begomovirus	★ u	★ u	★							
Tomato yellow mosaic begomovirus	★ u	★ u	★			★				★
Wild potato mosaic potyvirus			★				★		★	



Ministry of Agriculture and Forestry
Te Manatu Ahuwhenua, Ngaherehere

DECLARATION FOR GENETICALLY MODIFIED ORGANISMS

I..... declare, pursuant to Section 123 of the New Zealand Hazardous Substances and New Organisms Act 1996, that the *Solanum tuberosum* plants in tissue culture being imported are not genetically modified organisms.

genetically modified organism means, unless expressly provided otherwise by regulations, any organism in which any of the genes or any other genetic material have been modified by in vitro techniques or are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques (as defined by the New Zealand HSNO Act 1996).

Signed by (print name):

Company Name and Details (if appropriate):

Signature:

Date:

Warning: Any person knowingly importing a genetically modified organism without proper authorisation may, on conviction, be sentenced to a term of imprisonment and/or a fine not exceeding \$500,000.00. The making of this declaration does not provide an exemption from any provisions of the Hazardous Substances and New Organisms Act 1996.

Solidago

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Solidago*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Quarantine Pests: Aster yellows phytoplasma, Uredinales; *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "Aster yellows phytoplasma is not known to occur in ____ (the country or state where the plants were grown) ____".
2. "The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested or inspected and found free of Aster yellows phytoplasma".

Syringa

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Syringa*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Virus & virus-like diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

“The plants were inspected during the growing season and no symptoms of viruses or virus-like diseases were detected”.

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2;

PLUS

Additional Declaration:

“The cultures have been derived from parent stock tested and found free of viruses or virus-like diseases”.

Tillandsia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Tillandsia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: Basic; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Tricyrtis

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Tricyrtis*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Tetranychus kanzawai*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

"The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre of water".

B. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2

Tritonia

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Tritonia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Puccinia gladioli*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

Additional Declarations:

"*Puccinia gladioli* is not known to occur in _____ (the country or state where the plants were grown) _____".

OR

"The plants were inspected during the growing season and *Puccinia gladioli* was not detected".

B. For Dormant Bulbs (Corms) from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

Cleanliness: Bulbs (corms) must be free of leafy coverings.

Additional Declaration(s):

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

An import permit is required.

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Tulipa

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Tulipa*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Tulipa* nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

2. Pests of *Tulipa*

Refer to the pest list.

3. Entry conditions for:

3.1 *Tulipa* dormant bulbs from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Tulipa* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests including *Fusarium oxysporum* f. sp. *tulipae* OR treated for regulated fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi (except *Fusarium oxysporum* f. sp. *tulipae*) OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses.

AND

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or

Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Tulipa* dormant bulbs in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests including *Fusarium oxysporum* f. sp. *tulipae*.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi [if applicable].

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses."

(iv) Post-entry quarantine

PEQ: Level 1

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants and with prior approval from a MAF Inspector.

3.2 *Tulipa* dormant bulbs from the Netherlands

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Tulipa* dormant bulbs have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

AND

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses.

AND

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Tulipa* dormant bulbs in this consignment have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi [if applicable].

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses."

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

3.3 *Tulipa* plants in tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Tulipa* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Tobacco rattle virus*, *Tomato black ring virus* and *Tomato bushy stunt virus*.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Tulipa* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

AND

- tested using molecular/ serological methods [choose ONE option] and found free of *Tobacco rattle virus*, *Tomato black ring virus* and *Tomato bushy stunt virus*."

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Tulipa*

REGULATED PESTS (actionable)

Insect

Insecta

Diptera

Anthomyiidae

Delia antiqua

onion maggot

Homoptera

Aphididae

Rhopalosiphoninus staphyleae tulipaellus

tulip leaf aphid

Orthoptera

Gryllotalpidae

Gryllotalpa gryllotalpa

mole cricket

Thysanoptera

Thripidae

Taeniothrips eucharii

oriental thrips

Mite

Arachnida

Acarina

Eriophyidae

Aceria tulipae [vector]

wheat curl mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Xiphimena coxi

dagger nematode

Trichodoridae

Paratrichodorus pachydermus [vector]

stubby root nematode

Paratrichodorus teres

stubby root nematode

Trichodorus similis

stubby root nematode

Secernentea

Tylenchida

Tylenchidae

Ditylenchus dipsaci [strains not in New Zealand]

stem and bulb nematode

Fungus

Ascomycota

Leotiales

Sclerotiniaceae

Sclerotinia bulborum

black slime

Sclerotinia galanthina

bulb rot

Basidiomycota: Ustomycetes

Ustilaginales

Ustilaginaceae

Ustilago tulipae

smut

mitosporic fungi (Agonomycetes)

Agonomycetales

unknown Agonomycetales

Rhizoctonia tuliparum

basal rot

Sclerotium perniciosum

smoulder

Sclerotium wakkeri

blackleg

mitosporic fungi (Hyphomycetes)

Tuberculariales

Tuberculariaceae

Fusarium oxysporum f. sp. *tulipae*

fusarium bulb rot

Bacterium

Corynebacteriaceae

Curtobacterium flaccumfaciens pv. *oortii*

yellow pock

Virus

Cymbidium ringspot virus

-

Tobacco rattle virus [strains not in New Zealand]

-

Tomato black ring virus

-

Tomato bushy stunt virus

-

Tomato ringspot virus [strains not in New Zealand]

-

Tulip grey virus (syn. *Tulip severe mosaic virus*)

-

Tulip halo necrosis virus

-

Tulip mild mosaic virus

-

Tulip mild mottle mosaic virus

-

Tulip virus X

-

Wa tulip virus

-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Diptera

Syrphidae

Merodon equestris

narcissus bulb fly

Homoptera

Aphididae

Aulacorthum circumflexum

mottled arum aphid

Dysaphis tulipae

tulip bulb aphid

Rhopalosiphoninus latysiphon

bulb and potato aphid

Rhopalosiphoninus staphyleae

hop aphid

Mite

Arachnida

Acarina

Acaridae

Rhizoglyphus echinopus

bulb mite

Rhizoglyphus robini

bulb mite

Eriophyidae

Aceria tulipae

wheat curl mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Longidorus elongatus

needle nematode

Xiphinema americanum

American dagger nematode

Trichodoridae

Paratrichodorus pachydermus

stubby root nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides subtenuis

narcissus bulb and leaf nematode

Dolichodoridae

Tylenchorhynchus dubius

-

Tylenchidae

Ditylenchus destructor

potato rot nematode

Ditylenchus dipsaci

stem and bulb nematode

Fungus

Ascomycota

Hypocreales

Hypocreaceae

Gibberella avenacea (anamorph *Fusarium avenaceum*)

fusarium stem canker

Leotiales

Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)

grey mould

Sclerotinia gladioli

dry rot

Sclerotinia minor

sclerotinia rot

Sclerotinia sclerotiorum

cottony rot

Phyllachorales

Phyllachoraceae

Glomerella cingulata (anamorph *Colletotrichum gloeosporioides*)

anthracnose

Basidiomycota: Basidiomycetes

Ceratobasidiales

Ceratobasidiaceae

Thanatephorus cucumeris (anamorph *Rhizoctonia solani*) rhizoctonia rot

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*) Rolf's disease

Oomycota

Pythiales

Pythiaceae

Phytophthora cactorum phytophthora crown and root rot

Phytophthora cryptogea pink rot

Phytophthora erythroseptica pink rot

Pythium ultimum leak

mitosporic fungi (Hyphomycetes)

Hyphomycetales

Moniliaceae

Botrytis tulipae blast

Bacterium

Enterobacteriaceae

Erwinia carotovora subsp. *carotovora* bacterial soft rot

Pseudomonadaceae

Burkholderia andropogonis leaf spot

Burkholderia gladioli pv. *alliiicola* bacterial soft rot

Virus

Arabidopsis mosaic virus -

Bean yellow mosaic virus -

Cucumber mosaic virus -

Lily symptomless virus -

Strawberry latent ringspot virus -

Tobacco mosaic virus -

Tobacco necrosis virus -

Tobacco rattle virus [Paeonia and Narcissus infecting strains] -

Tobacco ringspot virus -

Tomato ringspot virus [Grape yellow vein strain] -

Tulip breaking virus (syn. *Tulip mosaic virus*) -

Turnip mosaic virus -

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Ulmus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Elm mosaic virus, Elm phloem necrosis; *Xylella fastidiosa*

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

For Whole Plants and Tissue Cultures:

PEQ: Level 3

Minimum Period: 3 months

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Vaccinium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

These conditions do not apply to *Vaccinium macrocarpon*.

1. Type of *Vaccinium* [excluding *Vaccinium macrocarpon*] nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

2. Pests of *Vaccinium*

Refer to the pest list.

3. Entry conditions for:

3.1 *Vaccinium* cuttings and tissue culture from offshore MAF-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. The operator of the accredited facility must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Vaccinium*. Refer to the “*Vaccinium* Inspection, Testing and Treatment Requirements”.

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Vaccinium* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MAF and the [name of the MAF-accredited facility].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section and by providing the following additional declarations to the phytosanitary certificate:

"The *Vaccinium* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MAF and the [name of the MAF-accredited facility].

AND

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

(iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(v) Post-entry quarantine

PEQ: All *Vaccinium* nursery stock must be imported under permit into post-entry quarantine in a level 2 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON

Specification for the registration of a plant quarantine or containment facility, and operator.

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 6 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Vaccinium* cuttings and tissue culture from non-accredited facilities in any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Vaccinium* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the preshipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.

(iv) Post-entry quarantine

PEQ: All *Vaccinium* nursery stock must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON

Specification for the registration of a plant quarantine or containment facility, and operator.

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of either 9 (tissue culture) or 16 months (cuttings) in post-entry quarantine. During this time it will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Vaccinium*”, at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Vaccinium*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Cerambycidae

Oberea myops

azalea stem borer

Chrysomelidae

Altica sylvia

blueberry flea beetle

Rhabdopterus picipes

cranberry rootworm

Curculionidae

Anthonomus musculus

cranberry weevil

Conotrachelus nenuphar

plum curculio

Pseudanthonomus validus

currant fruit weevil

Scarabaeidae

Popillia japonica

Japanese beetle

Diptera

Cecidomyiidae

Contarinia vaccinii

blueberry tip midge

Tephritidae

Rhagoletis mendax

blueberry maggot

Hemiptera

Coreidae

Veneza phyllopus

leaf-footed bug

Homoptera

Aphididae

Illinoia azaleae

azalea aphid

Illinoia borealis

aphid

Illinoia pepperi

blueberry aphid

Cicadellidae

Euscelis striatulus

Blunt-nosed leafhopper

Scaphytopius magdalenis

sharpnosed leafhopper

Hymenoptera

Tenthredinidae

Caliroa annulipes

sawfly

Neopareophora litura

gooseberry sawfly

Pristiphora idiota

willow redgall sawfly

Pristiphora mollis

-

Lepidoptera

Arctiidae

Hyphantria cunea

fall webworm

Geometridae

Itame ribearia

currant spanworm

Noctuidae

Acronicta tritona

acronicta caterpillar

Actebia fennica

black army cutworm

Notodontidae

Datana major

azalea caterpillar

Pyralidae

Acrobasis vaccinii

cranberry fruitworm

Sphingidae

Paonias astylus

huckleberry sphinx

Tortricidae

Archips rosanus

rose leafroller

Argyrotaenia velutinana

red-banded leafroller

Aroga trialbamaculella

leaf-tier

Cheimophila salicella

European carnation tortrix

Choristoneura hebenstreitella

tortricid

<i>Choristoneura rosaceana</i>	oblique-banded leafroller
<i>Cydia packardi</i>	cherry fruitworm
<i>Dichomeris vacciniella</i>	leaf-tier
<i>Hendecaneura shawiana</i>	blueberry tip borer
<i>Spilonota ocellana</i>	eyespot bud moth
Thysanoptera	
Thripidae	
<i>Catanthrips similis</i>	thrips
<i>Catanthrips vaccinicola</i>	thrips
<i>Frankliniella bispinosa</i>	flower thrips
<i>Frankliniella tritici</i>	eastern flower thrips
<i>Frankliniella vaccinii</i>	blueberry thrips
<i>Scirtothrips ruthveni</i>	-
<i>Taeniothrips vaccinophilus</i>	thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
<i>Acalitus vaccinii</i>	blueberry bud mite
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
<i>Diaporthe vaccinii</i> (anamorph <i>Phomopsis vaccinii</i>)	twig blight
Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria corticis</i>	cane blight
<i>Botryosphaeria vaccinii</i> (anamorph <i>Phyllosticta elongata</i>)	--
Polystomellaceae	
<i>Dothidella vacciniicola</i>	twig canker
Erysiphales	
Erysiphaceae	
<i>Microsphaera penicillata</i>	powdery mildew
<i>Microsphaera vaccinii</i>	powdery mildew
Hypocreales	
Hypocreaceae	
<i>Calonectria illicicola</i> (anamorph <i>Cylindrocladium crotalariae</i>)	root and stem rot
Leotiales	
Leotiaceae	
<i>Godronia cassandrae</i> (anamorph <i>Fusicoccum putrefaciens</i>)	foliage spot
<i>Godronia cassandrae</i> f. sp. <i>vaccinii</i>	cane canker
Sclerotiniaceae	
<i>Monilinia baccarum</i>	mummy berry
<i>Monilinia fructigena</i> (anamorph <i>Monilia fructigena</i>)	European brown rot
<i>Monilinia ledi</i>	twig blight
<i>Monilinia megalospora</i>	-
<i>Monilinia oxycocci</i>	-
<i>Monilinia urnula</i>	brown rot
<i>Monilinia vaccinii-corymbosi</i>	brown rot
Phyllachorales	
Phyllachoraceae	
<i>Ophiodothella vaccinii</i>	fly speck leaf spot
Meliolales	
Meliolaceae	
<i>Asteridiella exilis</i>	black mildew
Rhizomatales	
Rhizomataceae	
<i>Lophodermium hypophyllum</i>	-
<i>Lophodermium maculare</i>	leaf spot
<i>Rhizoma vaccinii</i>	tar leaf spot

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria mellea (anamorph *Rhizomorpha subcorticalis*) armillaria root rot

Armillaria ostoyae armillaria root rot

Basidiomycota: Teliomycetes

Uredinales

Pucciniastraceae

Pucciniastrum goeppertianum rust

Pucciniastrum vaccinii rust

Oomycota

Pythiales

Pythiaceae

Phytophthora ramorum sudden oak death disease

mitosporic fungi (Coelomycetes)

Sphaerosidales

Sphaerioidaceae

Dothichiza caroliniana double leaf spot

Coniothyrium vaccinicola brand canker

Phoma vaccinii stem blight

Piggotia vaccinii leaf spot

Septoria albopunctata septoria spot

Septoria vaccinii septoria spot

unknown Coelomycetes

unknown Coelomycetes

Gloeosporium minus leaf spot and stem canker

Leptothyrium conspicuum fly speck

mitosporic fungi (Hyphomycetes)

Hyphomycetales

Dematiaceae

Curvularia inaequalis leaf mould

Moniliaceae

Gloeocercospora inconspicua leaf spot

Ramularia vaccinii leaf spot

unknown Hyphomycetes

unknown Hyphomycetes

Aureobasidium vaccinii twig and leaf blight

Bacterium

Rhizobiaceae

Agrobacterium rubi cane gall

Virus

Blueberry leaf mottle virus -

Blueberry red ringspot virus (syn. *Cranberry ringspot virus*) -

Blueberry scorch virus -

Blueberry shock virus -

Blueberry shoestring virus -

Peach rosette mosaic virus -

Tobacco streak virus [strains not in New Zealand] -

Tomato ringspot virus [strains not in New Zealand] -

Phytoplasma

Blueberry stunt phytoplasma -

Cranberry false blossom phytoplasma -

Vaccinium witches' broom phytoplasma -

Disease of unknown aetiology

Blueberry mosaic disease -

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera	
Chrysomelidae	
<i>Eucolaspis brunnea</i>	bronze beetle
Curculionidae	
<i>Asynonychus cervinus</i>	Fuller's rose weevil
<i>Irenimus compressus</i>	compressed weevil
<i>Listroderes difficilis</i>	vegetable weevil
<i>Otiorhynchus sulcatus</i>	black vine weevil
<i>Phlyctinus callosus</i>	banded fruit weevil
Scarabaeidae	
<i>Costelytra zealandica</i>	grass grub
<i>Odontria xanthosticta</i>	scarab beetle
Diptera	
Anthomyiidae	
<i>Delia platura</i>	seedcorn maggot
Homoptera	
Aphididae	
<i>Aulacorthum circumflexum</i>	mottled arum aphid
<i>Aulacorthum solani</i>	foxglove aphid
<i>Myzus ornatus</i>	ornate aphid
Cercopidae	
<i>Philaenus spumarius</i>	meadow spittlebug
Coccidae	
<i>Coccus hesperidum</i>	brown soft scale
<i>Coccus longulus</i>	long brown scale
Diaspididae	
<i>Aspidiotus nerii</i>	oleander scale
<i>Hemiberlesia rapax</i>	greedy scale
Lepidoptera	
Geometridae	
<i>Declana floccosa</i>	forest semilooper
Psychidae	
<i>Liothula omnivora</i>	bag moth
Tortricidae	
<i>Ctenopseustis obliquana</i>	brownheaded leafroller
<i>Epiphyas postvittana</i>	light brown apple moth
Thysanoptera	
Thripidae	
<i>Frankliniella occidentalis</i>	western flower thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
<i>Tarsonemus pallidus</i>	banana mite
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria dothidea</i> (anamorph <i>Fusicoccum aesculi</i>)	canker
<i>Botryosphaeria obtusa</i> (anamorph <i>Sphaeropsis malorum</i>)	blight
Leptosphaeriaceae	
<i>Leptosphaeria coniothyrium</i> (anamorph <i>Coniothyrium fuckelii</i>)	common canker
Hypocreales	
Hypocreaceae	
<i>Calonectria kyotensis</i> (anamorph <i>Cylindrocladium scoparium</i>)	root and stem rot
Leotiales	
Leotiaceae	
<i>Discohainesia oenotherae</i> (anamorph <i>Hainesia lythri</i>)	leaf spot
Sclerotiniaceae	
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould

<i>Sclerotinia minor</i>	sclerotinia rot
<i>Sclerotinia sclerotiorum</i>	cottony rot
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	anthracnose
Basidiomycota: Ustomycetes	
Exobasidiales	
Exobasidiaceae	
<i>Exobasidium vaccinii</i>	red leaf gall
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
<i>Pythium irregulare</i>	pythium root and stem rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus stolonifer</i>	rhizopus soft rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Phoma huancayensis</i>	phoma rot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum acutatum</i>	anthracnose
<i>Pestalotia vaccinii</i>	leaf spot
<i>Seimatosporium vaccinii</i>	leaf spot
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Alternaria tenuissima</i>	alternaria mould
<i>Curvularia trifolii</i>	leaf spot
<i>Thielaviopsis basicola</i>	black root rot
Bacterium	
Pseudomonadaceae	
<i>Burkholderia andropogonis</i>	leaf spot
<i>Pseudomonas viridiflava</i>	leaf blight
Rhizobiaceae	
<i>Agrobacterium tumefaciens</i>	crown gall
Virus	
<i>Tobacco ringspot virus</i>	-
<i>Tobacco streak virus</i> [Black raspberry latent strain]	-
<i>Tomato ringspot virus</i> [Grape yellow vein strain]	-

Inspection, Testing and Treatment Requirements for *Vaccinium*

ORGANISM TYPES	MAF-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions)
Mite	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions)
Fungi	Growing season inspection in PEQ for disease symptom expression.
Bacterium	
<i>Agrobacterium rubi</i>	Growing season inspection in PEQ for disease symptom expression.
Virus	
<i>Blueberry leaf mottle virus</i>	Herbaceous indicators Cq and Nc AND ELISA or PCR AND TEM.
<i>Blueberry red ringspot virus</i> (syn. <i>Cranberry ringspot virus</i>)	ELISA or PCR AND TEM.
<i>Blueberry scorch virus</i>	Herbaceous indicator Cq AND ELISA or PCR AND TEM.
<i>Blueberry shock virus</i>	Herbaceous indicators Nc and Nt AND ELISA or PCR AND TEM.
<i>Blueberry shoestring virus</i>	ELISA or PCR AND TEM.
<i>Peach rosette mosaic virus</i>	Herbaceous indicators Cq and Nt AND ELISA or PCR AND TEM.
<i>Tobacco streak virus</i> [strains not in New Zealand]	Herbaceous indicators Cq and Nt AND ELISA or PCR AND TEM.
<i>Tomato ringspot virus</i> [strains not in New Zealand]	Herbaceous indicators Cq and Nt AND ELISA or PCR AND TEM.
Phytoplasmas	
Blueberry stunt phytoplasma	PCR using the universal phytoplasma fU5/rU3 primers (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 primers (Gundersen <i>et al.</i> 1996).
Cranberry false blossom phytoplasma	PCR using the universal phytoplasma fU5/rU3 primers (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 primers (Gundersen <i>et al.</i> 1996).
<i>Vaccinium</i> witches' broom phytoplasma	PCR using the universal phytoplasma fU5/rU3 primers (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 primers (Gundersen <i>et al.</i> 1996).
Disease of unknown aetiology	
Blueberry mosaic disease	Growing season inspection in PEQ for disease symptom expression.

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. Transmission electron microscopy (TEM); in the spring, leaves from grafted cuttings or tissue culture must be observed under the electron microscope for virus particles.
3. Herbaceous indicator hosts: *Chenopodium quinoa* (Cq), *Nicotiana clevelandii* (Nc) and *Nicotiana tabacum* (Nt). At least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season's growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
4. Enzyme linked immunosorbent assay (ELISA) and PCR tests for viruses. Tests are to be carried out using the new season's growth from grafted cuttings or tissue culture in the

spring. Plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.

5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
6. Inspect *Vaccinium* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
7. With prior notification, MAF will accept other internationally recognised testing methods.

References

- Gundersen, D.E., Lee, I.M. 1996. Ultrasensitive detection of phytoplasmas by nested-PCR assays using two universal primer pairs. *Phytopathologia Mediterranea* 35: 144-151.
- Lorenz, K.H., Scheider, B., Ahrens, U., Seemuller, E. 1995. Detection of the Apple proliferation and Pear decline phytoplasmas by PCR Amplification of ribosomal and nonribosomal DNA. *Phytopathology* 85: 771-776.

Vaccinium macrocarpon

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Vaccinium macrocarpon*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Vaccinium macrocarpon* nursery stock approved for entry into New Zealand
Cuttings (dormant); Plants in tissue culture

2. Pests of *Vaccinium macrocarpon*

Refer to the pest list.

3. Entry conditions for:

3.1 *Vaccinium macrocarpon* cuttings and tissue culture from offshore MAF-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. The operator of the accredited facility must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Vaccinium macrocarpon*. Refer to the “*Vaccinium macrocarpon* Inspection, Testing and Treatment Requirements”.

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium macrocarpon* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MAF and the [name of the MAF-accredited facility]

AND

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section and by providing the following additional declarations to the phytosanitary certificate:

"The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been

- held and tested for/classified free from specified regulated pests as required in the agreement between MAF and the [name of the MAF-accredited facility].

AND

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

(iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(v) Post-entry quarantine

PEQ: All *Vaccinium macrocarpon* nursery stock must be imported under permit into post-entry quarantine in a level 2 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator.*

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 6 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Vaccinium macrocarpon* cuttings and tissue culture from non-accredited facilities in any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium macrocarpon* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following

certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.

(iv) Post-entry quarantine

PEQ: All *Vaccinium macrocarpon* nursery stock must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator*.

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of either 9 (tissue culture) or 16 months (cuttings) in post-entry quarantine. During this time it will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Vaccinium macrocarpon*”, at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Vaccinium macrocarpon*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Chrysomelidae

Rhabdopterus picipes cranberry rootworm

Curculionidae

Anthonomus musculus cranberry weevil
Pseudanthonomus validus currant fruit weevil

Scarabaeidae

Popillia japonica Japanese beetle

Diptera

Tephritidae

Rhagoletis pomonella apple maggot fly

Homoptera

Aphididae

Aphis vaccinii blueberry aphid
Illinoia azaleae azalea aphid
Illinoia borealis aphid

Cicadellidae

Euscelis striatulus Blunt-nosed leafhopper

Hymenoptera

Tenthredinidae

Pristiphora idiota willow redgall sawfly

Lepidoptera

Arctiidae

Hyphantria cunea fall webworm

Geometridae

Itame ribearia currant spanworm

Noctuidae

Acrionicta tritona acronicta caterpillar
Actebia fennica black army cutworm

Pyralidae

Acrobasis vaccinii cranberry fruitworm

Tortricidae

Archips rosanus rose leafroller
Argyrotaenia velutinana red-banded leafroller
Aroga trialbamaculella leaf-tier
Choristoneura hebenstreitella tortricid
Choristoneura rosaceana oblique-banded leafroller
Dichomeris vacciniella leaf-tier

Thysanoptera

Thripidae

Frankliniella vaccinii blueberry thrips

Mite

Arachnida

Acarina

Eriophyidae

Acalitus vaccinii blueberry bud mite

Fungus

Ascomycota

Diaporthales

Valsaceae

Diaporthe vaccinii (anamorph *Phomopsis vaccinii*) twig blight

Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria vaccinii</i> (anamorph <i>Phyllosticta elongata</i>)	--
Erysiphales	
Erysiphaceae	
<i>Microsphaera penicillata</i>	powdery mildew
<i>Microsphaera vaccinii</i>	powdery mildew
Leotiales	
Leotiaceae	
<i>Godronia cassandrae</i> (anamorph <i>Fusicoccum putrefaciens</i>)	foliage spot
<i>Godronia cassandrae</i> f. sp. <i>vaccinii</i>	cane canker
Sclerotiniaceae	
<i>Monilinia fructigena</i> (anamorph <i>Monilia fructigena</i>)	European brown rot
<i>Monilinia oxycocci</i>	-
Rhizomatales	
Rhizomataceae	
<i>Lophodermium hypophyllum</i>	-
<i>Lophodermium maculare</i>	leaf spot
<i>Lophodermium oxycocci</i>	-
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i>)	armillaria root rot
Basidiomycota: Teliomycetes	
Uredinales	
Pucciniastraceae	
<i>Pucciniastrum goeppertianum</i>	rust
<i>Pucciniastrum vaccinii</i>	rust
Chytridiomycota	
Chytridiales	
Synchytriaceae	
<i>Synchytrium vaccinii</i>	red leaf gall
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Coniothyrium vaccinicola</i>	brand canker
<i>Phoma vaccinii</i>	stem blight
<i>Septoria vaccinii</i>	septoria spot
<i>Strasseria oxycocci</i>	fruit rot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Gloeosporium minus</i>	leaf spot and stem canker
<i>Leptothyrium conspicuum</i>	fly speck
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Curvularia inaequalis</i>	leaf mould
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas syringae</i> pv. <i>morsprunorum</i>	bacterial canker
Rhizobiaceae	
<i>Agrobacterium rubi</i>	cane gall
Virus	
<i>Blueberry scorch virus</i>	
<i>Blueberry red ringspot virus</i> (syn. <i>Cranberry ringspot virus</i>)	-
<i>Tobacco streak virus</i> [strains not in New Zealand]	-
Phytoplasma	
Cranberry false blossom phytoplasma	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Chrysomelidae

Eucolaspis brunnea bronze beetle

Curculionidae

Asynonychus cervinus Fuller's rose weevil

Irenimus compressus compressed weevil

Listroderes difficilis vegetable weevil

Otiorhynchus sulcatus black vine weevil

Phlyctinus callosus banded fruit weevil

Scarabaeidae

Costelytra zealandica grass grub

Odontria xanthosticta scarab beetle

Diptera

Anthomyiidae

Delia platura seedcorn maggot

Homoptera

Aphididae

Aulacorthum circumflexum mottled arum aphid

Aulacorthum solani foxglove aphid

Myzus ornatus ornate aphid

Cercopidae

Philaenus spumarius meadow spittlebug

Coccidae

Coccus hesperidum brown soft scale

Coccus longulus long brown scale

Diaspididae

Aspidiotus nerii oleander scale

Hemiberlesia rapax greedy scale

Lepidoptera

Geometridae

Declana floccosa forest semilooper

Psychidae

Liothula omnivora bag moth

Tortricidae

Ctenopseustis obliquana brownheaded leafroller

Epiphyas postvittana light brown apple moth

Fungus

Ascomycota

Dothideales

Botryosphaeriaceae

Botryosphaeria obtusa (anamorph *Sphaeropsis malorum*) blight

Leptosphaeriaceae

Leptosphaeria coniothyrium (anamorph *Coniothyrium fuckelii*) common canker

Leotiales

Leotiaceae

Discohainesia oenotherae (anamorph *Hainesia lythri*) leaf spot

Basidiomycota: Ustomycetes

Exobasidiales

Exobasidiaceae

Exobasidium vaccinii red leaf gall

Oomycota

Pythiales

Pythiaceae

Phytophthora cinnamomi phytophthora crown and root rot

Zygomycota: Zygomycetes

Mucorales	
Mucoraceae	
<i>Rhizopus stolonifer</i>	rhizopus soft rot
mitosporic fungi (Coelomycetes)	
unknown Coelomycetes	
unknown Coelomycetes	
<i>Pestalotia vaccinii</i>	leaf spot
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
Bacterium	
Pseudomonadaceae	
<i>Pseudomonas syringae</i> (pathovars in New Zealand)	bacterial blast
<i>Pseudomonas viridiflava</i>	leaf blight
Rhizobiaceae	
<i>Agrobacterium tumefaciens</i>	crown gall
Virus	
<i>Tobacco streak virus</i> [Black raspberry latent strain]	-

Inspection, Testing and Treatment Requirements for *Vaccinium macrocarpon*

ORGANISM TYPES	MAF-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions)
Mite	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions)
Fungi	Growing season inspection in PEQ for disease symptom expression.
Bacterium	
<i>Agrobacterium rubi</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Pseudomonas syringae</i> pv. <i>morsprunorum</i>	Growing season inspection in PEQ for disease symptom expression AND PCR (Bereswill <i>et al.</i> , 1994).
Virus	
<i>Blueberry scorch virus</i>	Herbaceous indicator Cq AND ELISA or PCR AND TEM.
<i>Blueberry red ringspot virus</i> (syn. <i>Cranberry ringspot virus</i>)	ELISA or PCR AND TEM.
<i>Tobacco streak virus</i> [strains not in New Zealand]	Herbaceous indicators Cq and Nt AND ELISA or PCR AND TEM.
Phytoplasmas	
Cranberry false blossom phytoplasma	PCR using the universal phytoplasma fU5/rU3 primers (Lorenz <i>et al.</i> 1995) AND R16F2n/R16R2 primers (Gundersen <i>et al.</i> 1996).

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. Transmission electron microscopy (TEM); in the spring, leaves from grafted cuttings or tissue culture must be observed under the electron microscope for virus particles.
3. Herbaceous indicator hosts: *Chenopodium quinoa* (Cq) and *Nicotiana tabacum* (Nt). At least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season's growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
4. Enzyme linked immunosorbent assay (ELISA) and PCR tests for viruses. Tests are to be carried out using the new season's growth from grafted cuttings or tissue culture in the spring. Plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.
5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
6. Inspect *Vaccinium macrocarpon* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
7. With prior notification, MAF will accept other internationally recognised testing methods.

References

- Bereswill S., Bugert P., Volksch B., Ullrich M., Bender C.L., Geider K. 1994. Identification and relatedness of coronatine-producing *Pseudomonas syringae* pathovars by PCR analysis and sequence determination of the amplification products. *Applied and Environmental Microbiology* 60: 2924-2930.
- Gundersen, D.E., Lee, I.M. 1996. Ultrasensitive detection of phytoplasmas by nested-PCR assays using two universal primer pairs. *Phytopathologia Mediterranea* 35: 144-151.
- Lorenz, K.H., Scheider, B., Ahrens, U., Seemuller, E. 1995. Detection of the Apple proliferation and Pear decline phytoplasmas by PCR Amplification of ribosomal and nonribosomal DNA. *Phytopathology* 85: 771-776.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Verbena*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Tetranychus kanzawai*, Uredinales

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

Additional Declarations:

1. "Rust diseases are not known to occur on _ (the imported genus) _ in _ (the country in which the plants were grown) _".
2. "The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre of water".

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

No import permit is required.

PEQ: None

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

OPTION 2:

PEQ: Level 1

Minimum Period: 3 months

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

OPTION 1:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

OPTION 2:

PEQ: Level 2

Minimum Period: 3 months

D. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Viburnum

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Viburnum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, USA.

Quarantine Pests: *Phytophthora ramorum*; Uredinales

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants from Australia and Canada (these commodities may not be imported from other countries):

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration(s):

1. "Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on _____(the host species being imported)_____ in _____ (the country in which the plants were grown) _____".
2. "The plants have been sourced from a “Pest free area”, free from *Phytophthora ramorum*".

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Vitis*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Vitis* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

Vitis can be imported into Level 2 post entry quarantine from MAF-accredited facilities, or into Level 3 post entry quarantine from non-accredited facilities.

2. Pests of *Vitis*

Refer to the pest list.

3. Entry conditions for:

3.1 *Vitis* cuttings and tissue culture from offshore MAF-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the MAF Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Vitis*, the accredited facility operator must also have an agreement with MAF on the phytosanitary measures to be undertaken for *Vitis*.

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vitis* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- sourced from either mother plants that have been kept in insect-proof plant houses or from open ground mother plants [cuttings only, choose ONE option].

AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MAF and the [name of the MAF-accredited facility].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section and by providing the following additional declarations to the phytosanitary certificate:

"The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MAF and the [name of the MAF-accredited facility].

AND

- sourced from mother plants that have been kept in insect-proof plant houses or sourced from open ground mother plants [cuttings only, choose ONE option].

AND

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

(iv) Post-entry quarantine

PEQ: All *Vitis* nursery stock must be imported under permit into post-entry quarantine in a level 2 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator.*

Quarantine Period and Inspection, Testing and Treatment Requirements: Upon arrival cuttings will be dipped in 1% sodium hypochlorite for 2 minutes [cuttings only]. The nursery stock will be grown for a minimum period of either 6 months (plants in tissue culture and cuttings sourced from mother plants that have been kept in insect-proof plant houses) or 16 months (cuttings sourced directly from open ground mother plants) in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. These periods are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Vitis* cuttings and tissue culture from non-accredited facilities in any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vitis* nursery stock exported to New Zealand.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MAF have been undertaken.

The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

AND

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.

(iv) Post-entry quarantine

PEQ: All *Vitis* nursery stock must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator.*

Quarantine Period and Inspection, Testing and Treatment Requirements: Upon arrival cuttings will be dipped in 1% sodium hypochlorite for 2 minutes [cuttings only]. The nursery stock will be grown for a minimum period of 16 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Sixteen months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Vitis*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Bostrichidae

<i>Amphicerus bicaudatus</i>	apple twig borer
<i>Amphicerus bimaculatus</i>	bostrichid beetle
<i>Amphicerus cornutus</i>	-
<i>Apate congener</i>	-
<i>Apate monachus</i>	black borer
<i>Bostrychopsis jesuita</i>	large auger beetle
<i>Dexicrates robustus</i>	-
<i>Melalgus confertus</i>	branch and twig borer
<i>Micrapate scabrata</i>	-
<i>Neoterius mistax</i>	-
<i>Psoa quadrisignata</i>	-
<i>Schistocerus bimaculatus</i>	grape cane borer
<i>Scobicia declivis</i>	lead cable borer
<i>Xylopertha retusa</i>	wood boring beetle
<i>Xylopsocus gibbicollis</i>	-

Buprestidae

<i>Agrilus marginicollis</i>	flatheaded grape borer
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Carabidae

<i>Adoxus obscurus</i> [Animals Biosecurity]	-
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Cerambycidae

<i>Acalolepta vastator</i>	-
<i>Cerasphorus albofasciatus</i>	grape trunk borer

Chrysomelidae

<i>Altica chalybaea</i>	grape flea beetle
<i>Altica torquata</i>	grapevine flea beetle
<i>Bromius obscurus</i>	western grape rootworm
<i>Fidia viticida</i>	grape root worm
<i>Glyptoscelis squamulata</i>	grape bud beetle
<i>Haltica</i> spp.	-
<i>Monolepta australis</i>	red-shouldered leaf beetle

Coccinellidae

<i>Coccinella transversoguttata</i> [Animals Biosecurity]	-
<i>Midas pygmaeus</i> [Animals Biosecurity]	-
<i>Nephus reunioni</i> [Animals Biosecurity]	-
<i>Rhyzobius ruficollis</i> [Animals Biosecurity]	-
<i>Stethorus</i> spp. [Animals Biosecurity]	-

Curculionidae

<i>Bustomus setulosus</i>	brown weevil
<i>Craponius inaequalis</i>	grape curculio
<i>Dischista cincna</i>	flower beetle
<i>Eremnus atratus</i>	black weevil
<i>Eremnus cerealis</i>	western province grain worm
<i>Eremnus setulosus</i>	grey weevil
<i>Naupactus xanthographus</i>	fruit tree weevil
<i>Orthorhinus cylindrirostris</i>	elephant weevil
<i>Orthorhinus klugi</i>	immigrant acacia weevil
<i>Otiorthynchus cribricollis</i>	cribrate weevil
<i>Perperus</i> spp.	apple root weevils
<i>Platyaspistes glaucus</i>	-
<i>Platyaspistes venustus</i>	-
<i>Rhigopsis effracta</i>	-
<i>Tanyrhynchus carinatus</i>	bud nibbler

Elateridae	
<i>Limonium canus</i>	Pacific Coast wireworm
Meloidae	
<i>Mylabris oculata</i>	-
Scarabaeidae	
<i>Athlia rustica</i>	-
<i>Cotalpa ursina</i>	-
<i>Hoplia callipyge</i>	-
<i>Hoplia pubicollis</i>	-
<i>Macroductylus subspinosus</i>	rose chafer
<i>Pachnoda sinuata</i>	scarab beetle
<i>Popillia japonica</i>	Japanese beetle
<i>Schizonycha</i> sp.	cockchafer
Scolytidae	
<i>Scolytus japonicus</i>	Japanese bark beetle
<i>Xyleborus dispar</i>	ambrosia beetle
<i>Xyleborus semiopacus</i>	black twig borer
Staphylinidae	
<i>Oligota pygmaea</i> [Animals Biosecurity]	-
Tenebrionidae	
<i>Blapstinus</i> sp.	darkling beetle
<i>Coniontis parviceps</i>	-
<i>Metoponium abnorme</i>	-
Diptera	
Cecidomyiidae	
<i>Diadiplosis koebelei</i>	-
Tachinidae	
<i>Ollacheryphe aenea</i> [Animals Biosecurity]	-
<i>Sturmia harrisinae</i> [Animals Biosecurity]	-
<i>Voriella uniseta</i> [Animals Biosecurity]	-
Hemiptera	
Anthocoridae	
<i>Orius</i> sp. [Animals Biosecurity]	-
Coreidae	
<i>Anthocoris</i> sp.	-
<i>Mictis profana</i>	crusader bug
Lygaeidae	
<i>Nysius raphanus</i>	false chinch bug
<i>Nysius vinitor</i>	Rutherglen bug
<i>Oxycarenus arctatus</i>	coon bug
Miridae	
<i>Creontiades dilutus</i>	green mirid
Pentatomidae	
<i>Euschistus conspersus</i>	stink bug
<i>Oechalia schellenbergi</i> [Animals Biosecurity]	Schellenberg's soldier bug
Pyrrhocoridae	
<i>Dindymus versicolor</i>	harlequin bug
Homoptera	
Aleyrodidae	
<i>Aleurocanthus woglumi</i>	citrus blackfly
<i>Tetraleurodes vittatus</i>	-
<i>Trialeurodes vittata</i>	grape whitefly
Aphididae	
<i>Aphis illinoisensis</i>	grapevine aphid
<i>Aphis medicaginis</i>	-
Asterolecaniidae	
<i>Asterolecanium pustulans</i>	oleander pit scale
Cerococcidae	
<i>Asterococcus muratae</i>	pit scale
Cicadellidae	
<i>Acia lineatifrons</i>	leafhopper
<i>Carneocephala fulgida</i>	red-headed sharpshooter

<i>Carneocephala fulgida</i> [vector]	red-headed sharpshooter
<i>Dikrella cockerellii</i>	blackberry leafhopper
<i>Draeculacephala minerva</i>	green sharpshooter
<i>Draeculacephala minerva</i> [vector]	green sharpshooter
<i>Empoasca</i> sp.	green leafhopper
<i>Erythroneura comes</i>	eastern grape leafhopper
<i>Erythroneura elegantula</i>	western grape leafhopper
<i>Erythroneura variabilis</i>	variegated grape leafhopper
<i>Erythroneura ziczac</i>	-
<i>Graphocephala atropunctata</i>	leafhopper
<i>Graphocephala atropunctata</i> [vector]	blue-green sharpshooter
<i>Hordnia circellata</i>	-
<i>Scaphoideus titanus</i> [vector]	raspberry leafhopper
Cicadidae	
<i>Platypedia minor</i>	-
<i>Tettigades chilensis</i>	-
Coccidae	
<i>Ceroplastes rusci</i>	fig wax scale
<i>Eulecanium cerasorum</i>	calico scale
<i>Eulecanium pruinosum</i>	frosted scale
<i>Heliococcus bohemicus</i>	scale
<i>Parthenolecanium persicae</i>	European peach scale
<i>Pulvinaria betulae</i>	scale
<i>Pulvinaria innumerabilis</i>	cottony maple scale
<i>Pulvinaria vitis</i>	woolly vine scale
Diaspididae	
<i>Aonidiella inornata</i>	inornate scale
<i>Chrysomphalus aonidium</i>	Florida red scale
<i>Diaspidiotus uvae</i>	grape scale
<i>Oceanspidiotus spinosus</i>	armoured scale
<i>Parlatoria cinerea</i>	chaff scale
<i>Parlatoria oleae</i>	olive scale
<i>Pinnaspis strachani</i>	hibiscus snow scale
<i>Pseudaonidia trilobitiformis</i>	trilobite scale
<i>Pseudaulacaspis pentagona</i>	white peach scale
<i>Quadraspidiotus juglansregiae</i>	walnut scale
<i>Selenaspis articulatus</i>	West Indian red scale
Margarodidae	
<i>Eurhizococcus brasiliensis</i>	margarodid
<i>Icerya seychellarum</i>	Seychelles scale
<i>Margarodes capensis</i>	Seychelles fluted scale
<i>Margarodes greeni</i>	soft scale
<i>Margarodes meridionalis</i>	-
<i>Margarodes prieskaensis</i>	margarodid
<i>Margarodes trimeni</i>	margarodid
<i>Margarodes vitis</i>	-
<i>Margarodes vredendalensis</i>	margarodid
Membracidae	
<i>Ceresa bubalus</i>	tree hopper
<i>Spissistilus bisonia</i>	-
<i>Spissistilus festinus</i>	three-cornered alfalfa hopper
Phylloxeridae	
<i>Viteus vitifoliae</i> [strain]	grape phylloxera
Pseudococcidae	
<i>Maconellicoccus hirsutus</i>	pink hibiscus mealybug
<i>Planococcus ficus</i>	fig mealybug
<i>Pseudococcus capensis</i>	-
<i>Pseudococcus maritimus</i>	grape mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
Hymenoptera	
Aphelinidae	
<i>Coccophagus caridei</i> [Animals Biosecurity]	-

<i>Coccophagus gurneyi</i> [Animals Biosecurity]	-
Bethylidae	
<i>Goniozus platynota</i> [Animals Biosecurity]	-
Braconidae	
<i>Apanteles harrisinae</i> [Animals Biosecurity]	-
<i>Bracon cushmani</i> [Animals Biosecurity]	-
<i>Dolichogenidea tasmanica</i> [Animals Biosecurity]	-
Dryinidae	
<i>Aphelopus albopictus</i> [Animals Biosecurity]	-
Encyrtidae	
<i>Acerophagus notativentris</i> [Animals Biosecurity]	-
<i>Anagyrus clauseni</i> [Animals Biosecurity]	-
<i>Anagyrus fusciventris</i> [Animals Biosecurity]	-
<i>Anagyrus pseudococci</i> [Animals Biosecurity]	-
<i>Leptomastix dactylopii</i> [Animals Biosecurity]	parasitic wasp
<i>Metaphycus flavus</i> [Animals Biosecurity]	-
<i>Pseudaphycus angelicus</i> [Animals Biosecurity]	-
<i>Zarhopalus corvinus</i> [Animals Biosecurity]	-
Eulophidae	
<i>Colpoclypeus florus</i> [Animals Biosecurity]	-
Formicidae	
<i>Anoplolepis steingroeveri</i> [Animals Biosecurity]	black ant
<i>Crematogaster peringueyi</i> [Animals Biosecurity]	cocktail ant
<i>Formica cinerea</i> [Animals Biosecurity]	ant
<i>Pogonomyrmex californica</i> [Animals Biosecurity]	California harvester ant
<i>Solenopsis xyloni</i> [Animals Biosecurity]	southern fire ant
<i>Veromessor pergandei</i> [Animals Biosecurity]	desert seed-harvester ant
Ichneumonidae	
<i>Campoplex capitator</i> [Animals Biosecurity]	-
<i>Dicaelotus inflexus</i> [Animals Biosecurity]	-
Mymaridae	
<i>Anagrus epos</i> [Animals Biosecurity]	-
Pteromalidae	
<i>Ophelosia charlesii</i> [Animals Biosecurity]	-
<i>Pachyneuron</i> sp. [Animals Biosecurity]	-
Trichogrammatidae	
<i>Trichogramma funiculatum</i> [Animals Biosecurity]	-
<i>Trichogrammatomyia tortricis</i> [Animals Biosecurity]	-
Vespidae	
<i>Polistes buysoni</i> [Animals Biosecurity]	-
Isoptera	
Kalotermitidae	
<i>Cryptotermes brevis</i>	West Indian drywood termite
<i>Kalotermes flavicollis</i>	termite
<i>Kalotermes minor</i>	-
<i>Neotermes chilensis</i>	termite
Rhinotermitidae	
<i>Coptotermes acinaciformis</i> [official control]	Australian subterranean termite
<i>Reticulitermes hesperus</i>	-
Termopsidae	
<i>Porotermes quadricollis</i>	-
Lepidoptera	
Agaristidae	
<i>Agarista agricola</i>	painted vine moth
<i>Heraclia superba</i>	grapevine zebra moth
Arctiidae	
<i>Estigmene acrea</i>	saltmarsh caterpillar
<i>Hyphantria cunea</i>	fall webworm
<i>Laora variabilis</i>	-
<i>Spilosoma virginica</i>	yellow woollybear
<i>Turuptiana obliqua</i>	tiger moth
Cossidae	

<i>Coryphodema tristis</i>	quince trunk borer
<i>Zeuzera coffeae</i>	red coffee borer
Heliozelidae	
<i>Antispila rivillei</i>	-
Noctuidae	
<i>Achaea</i> spp.	fruit-piercing moths
<i>Agrotis munda</i>	brown cutworm
<i>Alabama argillacea</i>	cotton leafworm
<i>Anomis mesogona</i>	hibiscus looper
<i>Anomis</i> spp.	-
<i>Calyptra</i> spp.	fruit-piercing moths
<i>Copitarsia consueta</i>	noctuid moth
<i>Eudocima</i> spp.	fruit-piercing moths
<i>Euxoa messoria</i>	darksided cutworm
<i>Euxoa ochrogaster</i>	redbacked cutworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Mythimna</i> sp.	-
<i>Noctua fimbriata</i>	broad-bordered yellow underwing
<i>Noctua pronuba</i>	large yellow underwing
<i>Oraesia</i> spp.	fruit-piercing moths
<i>Orthodes rufula</i>	cutworm
<i>Peridroma margaritosa</i>	-
<i>Peridroma saucia</i>	variegated cutworm
<i>Protorthodes rufula</i>	-
<i>Serodes</i> spp.	fruit-piercing moth
<i>Sphingomorpha</i> spp.	-
<i>Spodoptera littoralis</i>	cotton leafworm
<i>Xestia c-nigrum</i>	spotted cutworm
Oecophoridae	
<i>Echiomima</i> sp.	-
<i>Maroga melanostigma</i>	fruit tree borer
Psychidae	
<i>Gymnelema plebigena</i>	bagworm
Pterophoridae	
<i>Geina periscelidactylus</i>	-
Pyralidae	
<i>Desmia funeralis</i>	grape leaf-folder
<i>Euzophera bigella</i>	quince moth
<i>Ostrinia nubilalis</i>	European corn borer
Saturniidae	
<i>Hemileuca eglanterina</i>	brown day-moth
<i>Hyalophora cecropia</i>	cecropia moth
Sesiidae	
<i>Vitacea polistiformis</i>	grape root borer
Sphingidae	
<i>Eumorpha achemon</i>	achemon sphinx
<i>Hippotion celerio</i>	grapevine hawk moth
<i>Hyles euphorbiae</i>	spurge hawk moth
<i>Hyles lineata</i>	whitelined sphinx
<i>Theretra capensis</i>	grapevine hawk moth
<i>Theretra oldenlandiae</i>	vine hawk moth
Tortricidae	
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Argyrotaenia ljugiana</i>	grey red-barred tortrix
<i>Argyrotaenia velutinana</i>	red-banded leafroller
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Endopiza viteana</i>	-
<i>Eulia stalactitis</i>	-
<i>Eupoecilia ambiguella</i>	vine moth
<i>Lobesia botrana</i>	grape berry moth
<i>Paralobesia viteana</i>	grape berry moth

<i>Platynota stultana</i>	omnivorous leafroller
<i>Proeulia auraria</i>	grapevine leafroller
<i>Proeulia triqueta</i>	-
Zygaenidae	
<i>Harrisina americana</i>	grapeleaf skeletonizer
<i>Harrisina brillians</i>	western grapeleaf skeletonizer
<i>Theresimima ampelophaga</i>	zygaenid butterfly
Neuroptera	
Chrysopidae	
<i>Chrysopa oculata</i> [Animals Biosecurity]	-
<i>Chrysopa</i> spp. [Animals Biosecurity]	-
Coniopterygidae	
<i>Cryptosceneae australiensis</i> [Animals Biosecurity]	-
Hemerobiidae	
<i>Micromus</i> sp. [Animals Biosecurity]	-
Orthoptera	
Acrididae	
<i>Melanoplus femurrubrum</i>	red-legged grasshopper
<i>Melanoplus mexicanus devastator</i>	-
<i>Oedaleonotus enigma</i>	-
<i>Phaulacridium vittatum</i>	wingless grasshopper
<i>Schistocerca cancellata</i>	-
<i>Schistocerca shoshone</i>	-
<i>Schistocerca vaga</i>	-
Gryllidae	
<i>Acheta fulvipennis</i>	cricket
<i>Microgryllus pallipes</i>	cricket
Tettigoniidae	
<i>Caedicia</i> spp.	-
<i>Plangia graminea</i>	grasshopper
Thysanoptera	
Phlaeothripidae	
<i>Haplothrips victoriensis</i>	tubular black thrips
Thripidae	
<i>Calliothrips fasciatus</i>	bean thrip
<i>Drepanothrips reuteri</i>	grape thrips
<i>Frankliniella cestrum</i>	tomato thrips
<i>Frankliniella minuta</i>	minute flower thrips
<i>Frankliniella occidentalis</i> [pesticide resistant strain]	western flower thrips
<i>Heliothrips sylvanus</i>	thrips
<i>Rhipiphorothrips cruentatus</i>	leaf thrips
<i>Scirtothrips citri</i>	citrus thrips
<i>Scolothrips sexmaculatus</i> [Animals Biosecurity]	-
Unknown Insecta	
Unknown Insecta	
<i>Cryptolarynx vitis</i>	-
<i>Dyctineis pulvinosus</i>	-
Mite	
Arachnida	
Acarina	
Anystidae	
<i>Anystis agilis</i> [Animals Biosecurity]	-
Eriophyidae	
<i>Colomerus vitis</i> [leaf curling strain]	grape erineum mite
<i>Phyllocoptes vitis</i>	eriophyid mite
Phytoseiidae	
<i>Amblyseius victoriensis</i> [Animals Biosecurity]	-
<i>Metaseiulus occidentalis</i> [Animals Biosecurity]	-
<i>Neoseiulus chilensis</i> [Animals Biosecurity]	predator mite
<i>Typhlodromus dorenae</i> [Animals Biosecurity]	-
Tenuipalpidae	

<i>Brevipalpus chilensis</i>	false spider mite
<i>Brevipalpus lewisi</i>	bunch mite
<i>Brevipalpus liliun</i>	false spider mite
<i>Brevipalpus obovatus</i>	privet mite
<i>Tenuipalpus granati</i>	false spider mite
Tetranychidae	
<i>Eotetranychus carpini</i>	tetranychid mite
<i>Eotetranychus pruni</i>	hickory scorch mite
<i>Eotetranychus smithi</i>	tetranychid mite
<i>Eotetranychus viticola</i>	tetranychid mite
<i>Eotetranychus willamettei</i>	hazel mite
<i>Eotetranychus yumensis</i>	Yumi spider mite
<i>Eutetranychus orientalis</i>	pear leaf blister mite
<i>Oligonychus coffeae</i>	tea red spider mite
<i>Oligonychus mangiferus</i>	mango spider mite
<i>Oligonychus peruvianus</i>	spider mite
<i>Oligonychus punicae</i>	avocado brown mite
<i>Oligonychus yothersi</i>	avocado red mite
<i>Tetranychus kanzawai</i>	kanzawa mite
<i>Tetranychus mcdanieli</i>	McDaniel spider mite
<i>Tetranychus pacificus</i>	Pacific spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
<i>Ceruella virgata</i>	small banded snails
<i>Cochlicella barbara</i>	small pointed garden snail
<i>Theba pisana</i>	white Italian snail
Fungus	
Ascomycota	
Caliciales	
Unknown Caliciales	
<i>Roesleria pallida</i>	grape root rot
Diaporthales	
Valsaceae	
<i>Diaporthe rudis</i> (anamorph <i>Phomopsis rudis</i>)	phomopsis canker
Dothideales	
Mycosphaerellaceae	
<i>Guignardia bidwellii</i> (anamorph <i>Phyllosticta ampellicida</i>)	black rot
<i>Guignardia bidwellii</i> f. sp. <i>euvitis</i>	-
<i>Guignardia bidwellii</i> f. sp. <i>muscadinii</i>	-
<i>Mycosphaerella angulata</i> (anamorph <i>Cercospora brachypus</i>)	angular leaf spot
Schizothyriaceae	
<i>Schizothyrium pomi</i> (anamorph <i>Zygophiala jamaicensis</i>)	fly speck
Hypocreales	
Hypocreaceae	
<i>Cylindrocarpon destructans</i> var. <i>crassum</i>	root rot
Leotiales	
Dermateaceae	
<i>Pseudopezicula tetraspora</i>	angular leaf scorch
<i>Pseudopezicula tracheiphila</i>	rotbrenner
Sclerotiniaceae	
<i>Grovesinia pyramidalis</i> (anamorph <i>Cristulariella moricola</i>)	target spot
Rhytismatales	
Rhytismataceae	
<i>Rhytisma vitis</i>	tar spot
Saccharomycetales	
Saccharomycetaceae	
<i>Pichia membranaefaciens</i>	-

Unknown Ascomycota	
Hyponectriaceae	
<i>Physalospora baccae</i>	-
Xylariales	
Xylariaceae	
<i>Anthostomella pullulans</i>	Brulure
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i>)	armillaria root rot
<i>Armillaria</i> sp.	armillaria root rot
<i>Armillaria tabescens</i>	armillaria root rot
Ganodermatales	
Ganodermataceae	
<i>Ganoderma lucidum</i> (anamorph <i>Polyporus lucidus</i>)	wood rot
<i>Ganoderma tsugae</i>	-
Poriales	
Coriolaceae	
<i>Bjerkandera adusta</i>	white rot
<i>Bjerkandera fumosa</i>	--
Lentinaceae	
<i>Pleurotus ostreatus</i>	wood decay
Stereales	
Stereaceae	
<i>Stereum</i> sp.	-
Basidiomycota: Teliomycetes	
Uredinales	
Unknown Uredinales	
<i>Physopella ampelopsidis</i>	grape rust
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
<i>Phacellium</i> sp.	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Ascochyta ampelina</i>	leaf spot
<i>Coniella diplodiella</i>	white rot
<i>Coniella petrakii</i>	white rot
<i>Phomopsis longiparaphysata</i>	phomopsis rot
<i>Pyrenochaeta vitis</i>	leaf spot
<i>Septoria ampelina</i>	septoria leaf spot
Unknown Coelomycetes	
Unknown Coelomycetes	
<i>Natrassia toruloidea</i>	leaf spot
<i>Pestalotia menezesiana</i>	fruit rot
<i>Pestalotia pezizoides</i>	fruit and leaf spot
<i>Pestalotiopsis mangiferae</i>	grey leaf spot of mango
<i>Pestalotiopsis uvicola</i>	fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria vitis</i>	leaf disease
<i>Phaeoramularia dissiliens</i>	cercospora leaf spot
Moniliaceae	
<i>Cephalosporium</i> sp.	--
<i>Penicillium aurantiogriseum</i>	penicillium rot
<i>Verticillium heterocladium</i>	-
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Briosia ampelophaga</i>	leaf blotch
<i>Candida krusei</i>	yeasty rot

<i>Candida steatolytica</i> [Animals Biosecurity]	-
<i>Oidium</i> sp.	powdery mildew
<i>Paecilomyces farinosus</i>	-
<i>Paecilomyces</i> spp.	-
<i>Phaeoacremonium aleophilum</i>	-
<i>Phaeoisariopsis</i> sp.	-
<i>Stigmina vitis</i>	leaf fall

Bacterium

Pseudomonadaceae

<i>Xanthomonas campestris</i> pv. <i>viticola</i>	bacterial canker
<i>Xylella fastidiosa</i>	Pierce's disease
<i>Xylophilus ampelinus</i>	bacterial blight

Rhizobiaceae

<i>Agrobacterium rubi</i>	cane gall
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Virus

<i>Artichoke Italian latent virus</i>	-
<i>Broad bean wilt virus</i>	-
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	-
<i>Grapevine Ajinashika disease virus</i>	-
<i>Grapevine Algerian latent virus</i>	-
<i>Grapevine angular mosaic virus</i>	-
<i>Grapevine asteroid mosaic-associated virus</i>	-
<i>Grapevine berry inner necrosis virus</i>	-
<i>Grapevine Bulgarian latent virus</i>	-
<i>Grapevine chrome mosaic virus</i>	-
<i>Grapevine fanleaf virus</i> [strains not in New Zealand]	-
<i>Grapevine labile rod-shaped virus</i>	-
<i>Grapevine leafroll-associated virus</i> [type 4]	-
<i>Grapevine leafroll-associated virus</i> [type 5]	-
<i>Grapevine leafroll-associated virus</i> [type 6]	-
<i>Grapevine leafroll-associated virus</i> [type 7]	-
<i>Grapevine leafroll-associated virus</i> [type 9]	-
<i>Grapevine line pattern virus</i>	-
<i>Grapevine red globe virus</i>	-
<i>Grapevine stunt virus</i>	-
<i>Grapevine Tunisian ringspot virus</i>	-
<i>Grapevine virus B</i> [strains not in New Zealand]	-
<i>Grapevine virus C</i>	-
<i>Grapevine virus D</i>	-
<i>Peach rosette mosaic virus</i>	-
<i>Petunia asteroid mosaic virus</i>	-
<i>Raspberry ringspot virus</i>	-
<i>Sowbane mosaic virus</i>	-
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	-
<i>Tomato black ring virus</i>	-

Viroid

<i>Australian grapevine viroid</i>	-
<i>Grapevine yellow speckle viroid 1</i>	-
<i>Grapevine yellow speckle viroid 2</i>	-
<i>Hop stunt viroid</i>	-

Phytoplasma

Australian grapevine yellows phytoplasma	-
Grapevine bois noir phytoplasma	-
Grapevine flavescence doree phytoplasma	-
Grapevine yellows	-
Palatine grapevine yellows	-
Tomato big bud phytoplasma	-

Vergilbungskrankheit (German grapevine yellows) -

Disease of unknown aetiology
LN33 stem grooving -

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Cerambycidae

Oemona hirta

lemon tree borer

Chrysomelidae

Eucolaspis brunnea

bronze beetle

Coccinellidae

Cryptolaemus montrouzieri

mealybug destroyer

Curculionidae

Asynonychus cervinus

Fuller's rose weevil

Otiorynchus sulcatus

black vine weevil

Phlyctinus callosus

banded fruit weevil

Scarabaeidae

Costelytra zealandica

grass grub

Heteronychus arator

black beetle

Dermaptera

Forficulidae

Forficula auricularia

European earwig

Diptera

Drosophilidae

Drosophila melanogaster

vinegar fly

Hemiptera

Pentatomidae

Nezara viridula

green vegetable bug

Homoptera

Aphididae

Aphis gossypii

cotton aphid

Aphis spiraeicola

spirea aphid

Myzus persicae

green peach aphid

Coccidae

Coccus hesperidum

brown soft scale

Coccus persicae

grapevine scale

Lecanium persicae

-

Parasaissetia nigra

nigra scale

Parthenolecanium corni

European fruit scale

Saissetia oleae

black scale

Diaspididae

Aonidiella aurantii

California red scale

Aspidiotus nerii

oleander scale

Hemiberlesia lataniae

latania scale

Hemiberlesia rapax

greedy scale

Lepidosaphes ulmi

oystershell scale

Quadraspidiotus perniciosus

San Jose scale

Margarodidae

Icerya purchasi

cottony cushion scale

Phylloxeridae

Viteus vitifoliae

grape phylloxera

Pseudococcidae

Planococcus citri

citrus mealybug

Pseudococcus calceolariae

citrophilus mealybug

Pseudococcus longispinus

longtailed mealybug

Pseudococcus viburni

obscure mealybug

Rhizoecus falcifer

root mealybug

Ricaniidae

Scolypopa australis

passionvine hopper

Hymenoptera	
Encyrtidae	
<i>Tetracnemoidea brevicornis</i> [Animals Biosecurity]	-
<i>Tetracnemoidea sydneyensis</i> [Animals Biosecurity]	-
Formicidae	
<i>Linepithema humile</i> [Animals Biosecurity]	Argentine ant
Vespidae	
<i>Vespula germanica</i> [Animals Biosecurity]	German wasp
Lepidoptera	
Agaristidae	
<i>Phalaenoides glyciniae</i>	grapevine moth
Noctuidae	
<i>Agrotis ipsilon</i>	greasy cutworm
<i>Helicoverpa armigera</i>	tomato fruitworm
Tortricidae	
<i>Ctenopseustis obliquana</i>	brownheaded leafroller
<i>Epiphyas postvittana</i>	light brown apple moth
<i>Planotortrix excessana</i>	greenheaded leafroller
Neuroptera	
Chrysopidae	
<i>Chrysoperla carnea</i> [Animals Biosecurity]	-
Thysanoptera	
Thripidae	
<i>Frankliniella occidentalis</i>	western flower thrips
<i>Heliethrips haemorrhoidalis</i>	greenhouse thrips
<i>Limothrips cerealium</i>	grain thrips
<i>Thrips imaginis</i>	plague thrips
<i>Thrips obscuratus</i>	New Zealand flower thrips
<i>Thrips tabaci</i>	onion thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
<i>Colomerus vitis</i> [bud strain]	grape erineum mite
<i>Colomerus vitis</i> [erineum strain]	grape erineum mite
Phytoseiidae	
<i>Phytoseiulus persimilis</i> [Animals Biosecurity]	predatory mite
<i>Typhlodromus pyri</i> [Animals Biosecurity]	predatory mite
Tarsonemidae	
<i>Polyphagotarsonemus latus</i>	broad mite
Tenuipalpidae	
<i>Brevipalpus californicus</i>	bunch mite
<i>Brevipalpus phoenicis</i>	passionvine mite
Tetranychidae	
<i>Calepitrimerus vitis</i>	grapeleaf rust mite
<i>Eotetranychus sexmaculatus</i>	sixspotted mite
<i>Panonychus citri</i>	citrus red mite
<i>Panonychus ulmi</i>	European red mite
<i>Tetranychus cinnabarinus</i>	carmine spider mite
<i>Tetranychus urticae</i>	twospotted spider mite
Fungus	
Ascomycota	
Diatrypales	
Diatrypaceae	
<i>Eutypa armeniacae</i>	eutypa dieback
<i>Eutypa lata</i>	eutypa dieback

Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria dothidea</i> (anamorph <i>Fusicoccum aesculi</i>)	canker
<i>Botryosphaeria obtusa</i> (anamorph <i>Sphaeropsis malorum</i>)	blight
<i>Botryosphaeria stevensii</i> (anamorph <i>Diplodia mutila</i>)	botryosphaeria canker
Elsinoaceae	
<i>Elsinoe ampelina</i> (anamorph <i>Sphaceloma ampelinum</i>)	anthracnose
Mycosphaerellaceae	
<i>Mycosphaerella personata</i> (anamorph <i>Pseudocercospora vitis</i>)	isariopsis blight
<i>Mycosphaerella tassiana</i> (anamorph <i>Cladosporium herbarum</i>)	black leaf spot
Pleosporaceae	
<i>Pleospora herbarum</i> (anamorph <i>Stemphylium herbarum</i>)	black mould rot
Erysiphales	
Erysiphaceae	
<i>Phyllactinia guttata</i>	powdery mildew
<i>Uncinula necator</i> (anamorph <i>Oidium tuckeri</i>)	powdery mildew
Hypocreales	
Hypocreaceae	
<i>Calonectria kyotensis</i> (anamorph <i>Cylindrocladium scoparium</i>)	root and stem rot
<i>Gibberella fujikuroi</i> (anamorph <i>Fusarium fujikuroi</i>)	fusarium rot
<i>Nectria ochroleuca</i> (anamorph <i>Gliocladium roseum</i>)	fusarium rot
<i>Nectria radicola</i> (anamorph <i>Cylindrocarpon destructans</i>)	rot
Leotiales	
Sclerotiniaceae	
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould
<i>Monilinia fructicola</i>	American brown rot
<i>Monilinia laxa</i> (anamorph <i>Monilia laxa</i>)	European brown rot
<i>Sclerotinia sclerotiorum</i>	cottony rot
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	anthracnose
Xylariales	
Amphisphaeriaceae	
<i>Discostroma corticola</i> (anamorph <i>Seimatosporium lichenicola</i>)	stem spot
Xylariaceae	
<i>Rosellinia necatrix</i> (anamorph <i>Dematophora necatrix</i>)	white root rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
<i>Thanatephorus cucumeris</i> (anamorph <i>Rhizoctonia solani</i>)	rhizoctonia rot
Hymenochaetales	
Hymenochaetaceae	
<i>Phellinus punctatus</i>	heart rot
<i>Phellinus robustus</i>	black measles
Poriales	
Coriolaceae	
<i>Trametes versicolor</i>	white rot
Schizophyllales	
Schizophyllaceae	
<i>Schizophyllum commune</i>	agaric stem rot
Stereales	
Atheliaceae	
<i>Athelia rolfsii</i> (anamorph <i>Sclerotium rolfsii</i>)	Rolf's disease
Stereaceae	
<i>Stereum hirsutum</i>	black measles
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
<i>Phaeomoniella chlamydospora</i>	-
Mitosporic Fungi (Agonomycetes)	

Agonomycetales	
Agonomycetaceae	
<i>Beauveria bassiana</i> [Animals Biosecurity]	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Fusicoccum luteum</i>	bunch rot
<i>Lasiodiplodia theobromae</i>	fruit and stem-end rot
<i>Macrophomina phaseolina</i>	ashy stem blight
<i>Phoma flaccida</i>	leaf spot
<i>Phoma glomerata</i>	phoma fruit and leaf spot
<i>Phoma plurivora</i>	bunch rot
<i>Phomopsis viticola</i>	dead arm fungus
Unknown Coelomycetes	
Unknown Coelomycetes	
<i>Greeneria uvicola</i>	bitter rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Cladosporium cladosporioides</i>	cladosporium leaf spot
<i>Cladosporium oxysporum</i>	cladosporium leaf spot
<i>Mycosphaerella personata</i> (syn <i>Cladosporium viticola</i>)	cladosporium leaf spot
Moniliaceae	
<i>Aspergillus aculeatus</i>	aspergillus rot
<i>Aspergillus alutaceus</i>	aspergillus rot
<i>Aspergillus flavus</i>	aspergillus storage rot
<i>Aspergillus niger</i>	aspergillus rot
<i>Aspergillus wentii</i>	aspergillus rot
<i>Cylindrocladiella parva</i>	root rot
<i>Penicillium brevicompactum</i>	penicillium rot
<i>Penicillium canescens</i>	penicillium rot
<i>Penicillium digitatum</i>	green mould
<i>Penicillium glabrum</i>	--
<i>Verticillium dahliae</i>	verticillium wilt
Tuberculariales	
Tuberculariaceae	
<i>Fusarium oxysporum</i>	leaf spot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
<i>Trichothecium roseum</i>	pink rot
Oomycota	
Peronosporales	
Peronosporaceae	
<i>Plasmopara viticola</i>	downy mildew
Pythiales	
Pythiaceae	
<i>Phytophthora cactorum</i>	phytophthora crown and root rot
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
<i>Phytophthora citricola</i>	brown rot of fruit
<i>Phytophthora cryptogea</i>	pink rot
<i>Phytophthora megasperma</i>	pink rot
<i>Phytophthora nicotianae</i>	buckeye rot
<i>Pythium ultimum</i>	leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus arrhizus</i>	wet rot
<i>Rhizopus stolonifer</i>	rhizopus soft rot
Bacterium	
Pseudomonadaceae	

<i>Pseudomonas syringae</i>	bacterial blast
<i>Pseudomonas syringae</i> pv. <i>syringae</i>	bacterial soft rot
<i>Pseudomonas viridiflava</i>	leaf blight
Rhizobiaceae	
<i>Agrobacterium vitis</i>	crown gall

Virus

<i>Alfalfa mosaic virus</i>	-
<i>Arabis mosaic virus</i>	-
<i>Carnation mottle virus</i>	-
<i>Cherry leaf roll virus</i> [red raspberry strain]	-
<i>Cucumber mosaic virus</i>	-
<i>Grapevine rupestris stem pitting-associated virus</i>	-
<i>Grapevine fanleaf virus</i> [strains in New Zealand]	-
<i>Grapevine fleck virus</i>	-
<i>Grapevine leafroll-associated virus</i> [type 1]	-
<i>Grapevine leafroll-associated virus</i> [type 2]	-
<i>Grapevine leafroll-associated virus</i> [type 3]	-
<i>Grapevine virus A</i>	-
<i>Grapevine virus B</i> [strains in New Zealand]	-
<i>Potato virus X</i>	-
<i>Raspberry bushy dwarf virus</i>	-
<i>Strawberry latent ringspot virus</i> [Prunus-infecting strain]	-
<i>Tobacco mosaic virus</i>	-
<i>Tobacco necrosis virus</i>	-
<i>Tobacco ringspot virus</i>	-
<i>Tomato ringspot virus</i>	-
<i>Tomato spotted wilt virus</i>	-

Viroid

<i>Citrus exocortis viroid</i>	-
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Disease of unknown aetiology

Grapevine enation	-
Grapevine vein mosaic	-
Grapevine vein necrosis	-

Inspection, Testing and Treatment Requirements for *Vitis*

ORGANISM TYPES	MAF-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.5 of the basic conditions) [cuttings only].
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.5 of the basic conditions) [cuttings only] or binocular microscope inspection in PEQ [plants in tissue culture only].
Fungi	Growing season inspection in PEQ for disease symptom expression AND examination using a dissecting microscope or hand lens (longitudinal and transverse sections) AND plating on potato dextrose agar.
Bacterium	
<i>Agrobacterium rubi</i> , <i>Xanthomonas campestris</i> pv. <i>viticola</i> and <i>Xilophilus</i> <i>ampelinus</i>	Growing season inspection in PEQ for disease symptom expression AND Hot water treatment (Refer to “Approved Treatments for <i>Vitis</i> ”).
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for disease symptom expression AND PCR (Two tests; Minsavage <i>et al.</i> , 1994) AND Hot water treatment (Refer to “Approved Treatments for <i>Vitis</i> ”).
Virus	
<i>Artichoke Italian latent virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Broad bean wilt virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators (<i>Chenopodium amaranticolor</i> , <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana tabacum</i>).
<i>Grapevine Ajinashika disease virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine Algerian latent virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine angular mosaic virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine asteroid mosaic-associated virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine berry inner necrosis virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine Bulgarian latent virus</i>	Herbaceous indicators (<i>Chenopodium amaranticolor</i> and <i>C. quinoa</i>).
<i>Grapevine chrome mosaic virus</i>	PCR AND herbaceous indicators (<i>Chenopodium amaranticolor</i> , <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana tabacum</i>).
<i>Grapevine fanleaf virus</i> [strains not in New Zealand]	ELISA or PCR AND woody indicators (Saint George) or herbaceous indicators (<i>Chenopodium amaranticolor</i> , <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i>).
<i>Grapevine labile rod-shaped virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine leafroll-associated virus</i> [type 4]	ELISA or PCR AND woody indicators (Cabernet Franc, Merlot or Pinot Noir).
<i>Grapevine leafroll-associated virus</i> [type 5]	ELISA or PCR AND woody indicators (Cabernet Franc, Merlot or Pinot Noir).
<i>Grapevine leafroll-associated virus</i> [type 6]	Woody indicators (Cabernet Franc, Merlot or Pinot Noir).

<i>Grapevine leafroll-associated virus</i> [type 7]	PCR AND woody indicators (Cabernet Franc, Merlot or Pinot Noir).
<i>Grapevine leafroll-associated virus</i> [type 9]	Woody indicators (Cabernet Franc, Merlot or Pinot Noir).
<i>Grapevine line pattern virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine red globe virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine stunt virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine Tunisian ringspot virus</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine virus B</i> [strains not in New Zealand]	PCR and woody indicators (LN33).
<i>Grapevine virus C</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Grapevine virus D</i>	PCR.
<i>Peach rosette mosaic virus</i>	ELISA or PCR AND herbaceous indicators (<i>Chenopodium amaranticolor</i> , <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana tabacum</i>).
<i>Petunia asteroid mosaic virus</i>	PCR or ELISA.
<i>Raspberry ringspot virus</i>	ELISA or PCR AND herbaceous indicators (<i>Chenopodium amaranticolor</i> , <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana tabacum</i>).
<i>Sowbane mosaic virus</i>	Herbaceous indicators (<i>Chenopodium amaranticolor</i> and <i>C. quinoa</i>).
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	Herbaceous indicators (<i>Chenopodium amaranticolor</i> , <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i>).
<i>Tomato black ring virus</i>	ELISA or PCR AND herbaceous indicators (<i>Chenopodium amaranticolor</i> , <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana tabacum</i>).
Viroids	Growing season inspection in PEQ for disease symptom expression
Phytoplasmas	Nested PCR using the universal phytoplasma fU5/rU3 (Lorenz <i>et al.</i> 1995) and R16F2n/R16R2 primers (Gundersen <i>et al.</i> 1996) and Hot water treatment (Refer to “Approved Treatments for <i>Vitis</i> ”) [cuttings only] OR nested PCR using the universal phytoplasma fU5/rU3 (Lorenz <i>et al.</i> 1995) and R16F2n/R16R2 primers (Gundersen <i>et al.</i> 1996) (two sets) [tissue culture only].
Disease of unknown aetiology	
LN33 stem grooving	Woody indicator (LN33).

Notes:

1. The unit for testing is an individual plantlet or cutting. Each single plantlet and cutting must be labelled individually and tested separately.
2. Herbaceous indicator hosts: at least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season’s growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
3. Woody indicators: at least two plants of each woody indicator must be used in each test. All woody indicators are to be inoculated by double budding.

4. Enzyme linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) tests for viruses. Tests must be completed at the optimal time for detection. In general, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.
5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
6. Inspect *Vitis* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
7. With prior notification, MAF will accept other internationally recognised testing methods.

References

- Gundersen, D.E., Lee, I.M. 1996. Ultrasensitive detection of phytoplasmas by nested-PCR assays using two universal primer pairs. *Phytopathologia Mediterranea* 35: 144-151.
- Lorenz, K.H., Scheider, B., Ahrens, U., Seemuller, E. 1995. Detection of the Apple proliferation and Pear decline phytoplasmas by PCR Amplification of ribosomal and nonribosomal DNA. *Phytopathology* 85: 771-776.
- Minsavage G.V., Thompson C.M., Hopkins D.L., Leite R.M.V.B.C., Stall R.E., 1994. Development of a PCR protocol for detection of *Xylella fastidiosa* in plant tissue. *Phytopathology* 84: 456-461.

Approved Treatments for *Vitis*

Hot Water Treatment

The consignment must be treated using hot water treatment (dipping), for the eradication of phytoplasmas and fastidious vascular prokaryotic organisms, as follows:

1. Cuttings with good hydration and reserves are stored in a cool room (~ 4°C). Before treatment, the dormant material must be held at room temperature for one day (24 hours).
2. For the treatment, the dormant material must be dipped into the hot water at 50°C for 45 minutes or at 45°C for 3 hours (FAO/IBPGR Technical Guidelines for Safe Movement of Grapevine Germplasm, 1990, Martelli G.P and Walter B. Virus Certification of Grapevines. In - Plant Virus Disease Control, edited by A. Hadidi, RK Khetarpal and H Koganezawa. APS Press 1998). The water bath must have a moving system to homogenize the temperature and a precise control system to monitor the temperature at an accuracy of 0.1°C.
3. After the treatment the cuttings must stay for one day (24 hours) at room temperature. After this period they are transferred to a cool room.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Yucca*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Entry Conditions: **Basic**; with variations and additional conditions as specified below:

A. For Cuttings (dormant):

PEQ: Level 2

Minimum Period: 3 months

Inspection Requirements: A minimum of 600 plants are to be inspected during each inspection in post-entry quarantine

B. For Plants in Tissue Culture:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Zantedeschia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Zantedeschia* nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

2. Pests of *Zantedeschia*

Refer to the pest list.

3. Entry conditions for:

3.1 *Zantedeschia* dormant bulbs from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Zantedeschia* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria and viruses.

AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [if applicable], and by providing the following additional declaration to the phytosanitary certificate:

"The *Zantedeschia* dormant bulbs in this consignment have been:

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated nematodes and fungi [if applicable].

AND

- sourced from a “Pest free area”, “Pest free place of production” or “Pest free production site”, free from regulated bacteria, phytoplasmas and viruses."

(iv) Post-entry quarantine

PEQ: Level 1

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

3.2 *Zantedeschia* plants in tissue culture from any country

(i) Documentation

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media may contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Zantedeschia* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Impatiens necrotic spot virus*.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Zantedeschia* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

AND

- tested using molecular/ serological methods [choose ONE option] and found free of *Impatiens necrotic spot virus*."

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

Phytosanitary certificate: a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

Import permit: an import permit is required.

PEQ: Level 3

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Pest List for *Zantedeschia*

REGULATED PESTS (actionable)

Nematode

Secernentea

Tylenchida

Meloidogynidae

Meloidogyne arenaria

peanut root knot nematode

Fungus

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)

armillaria root rot

Oomycota

Pythiales

Pythiaceae

Phytophthora richardiae

rhizome and root rot

Pythium aphanidermatum

cottony leak

Bacterium

Xanthomonas campestris pv. *zantedeschiae*

-

Virus

Impatiens necrotic spot virus

-

Zantedeschia mild mosaic virus

-

Zantedeschia mosaic virus (syn. *Konjac mosaic virus*)

-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Curculionidae

Asynonychus cervinus

Fuller's rose weevil

Hemiptera

Coreidae

Acantholybas brunneus

-

Homoptera

Aphididae

Acyrtosiphon kondoi

bluegreen lucerne aphid

Aulacorthum circumflexum

mottled arum aphid

Coccidae

Coccus hesperidum

brown soft scale

Pseudococcidae

Pseudococcus calceolariae

citrophilus mealybug

Pseudococcus viburni

obscure mealybug

Lepidoptera

Tineidae

Opogona omoscopa

detritus moth

Thysanoptera

Thripidae

Hercinothrips femoralis

banded greenhouse thrips

Thrips obscuratus

New Zealand flower thrips

Thrips simplex

gladiolus thrips

Thrips tabaci

onion thrips

Mite

Arachnida

Acarina

Acaridae

Rhizoglyphus echinopus

bulb mite

Tetranychidae

Tetranychus cinnabarinus

carmine spider mite

Tetranychus urticae

twospotted spider mite

Nematode

Secernentea

Tylenchida

Meloidogynidae

Meloidogyne incognita

southern root knot nematode

Meloidogyne javanica

Javanese root knot nematode

Fungus

Ascomycota

Dothideales

Mycosphaerellaceae

Mycosphaerella tassiana (anamorph *Cladosporium herbarum*)

black leaf spot

Erysiphales

Erysiphaceae

Leveillula taurica (anamorph *Oidiopsis sicula*)

powdery mildew

Hypocreales

Hypocreaceae

Bionectria ochroleuca (anamorph *Gliocladium roseum*)

fusarium rot

Calonectria kyotensis (anamorph *Cylindrocladium scoparium*)

root and stem rot

Gibberella zeae (anamorph *Fusarium graminearum*)

headblight of maize

Nectria haematococca (anamorph *Fusarium solani*)

fusarium fruit rot

Nectria inventa (anamorph *Verticillium tenerum*)

verticillium rot

Nectria radicola (anamorph *Cylindrocarpon destructans*)

rot

Leotiales

Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)

grey mould

Saccharomycetales

Dipodascaceae

Dipodascus geotrichum (anamorph *Geotrichum candidum*)

sour rot

Xylariales

Xylariaceae

Rosellinia necatrix (anamorph *Dematophora necatrix*)

white root rot

Ceratobasidiales

Ceratobasidiaceae

Thanatephorus cucumeris (anamorph *Rhizoctonia solani*)

rhizoctonia rot

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*)

Rolf's disease

Oomycota

Pythiales

Pythiaceae

Phytophthora erythroseptica

pink rot

Pythium coloratum

pythium root rot

Phytophthora meadii

phytophthora rot

Pythium myriotylum

rhizome and root rot

Zygomycota: Zygomycetes

Mucorales

Mucoraceae

Rhizopus stolonifer

rhizopus soft rot

mitosporic fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

<i>Phoma exigua</i>	phoma rot
<i>Pyrenochaeta terrestris</i>	pink root rot
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Drechslera dematioidea</i>	--
<i>Thielaviopsis basicola</i>	black root rot
Moniliaceae	
<i>Verticillium tricorpus</i>	verticillium wilt
Tuberculariales	
Tuberculariaceae	
<i>Fusarium crookwellense</i>	seed potato rot
<i>Fusarium oxysporum</i>	leaf spot
Bacterium	
Enterobacteriaceae	
<i>Erwinia carotovora</i> subsp. <i>carotovora</i>	bacterial soft rot
Pseudomonadaceae	
<i>Pseudomonas fluorescens</i>	pink eye
<i>Pseudomonas syringae</i> pv. <i>syringae</i>	bacterial soft rot
Virus	
<i>Alfalfa mosaic virus</i>	-
<i>Arabidopsis mosaic virus</i>	-
<i>Carnation mottle virus</i>	-
<i>Cucumber mosaic virus</i>	-
<i>Dasheen mosaic virus</i>	-
<i>Potato virus X</i>	-
<i>Tomato spotted wilt virus</i>	-
<i>Turnip mosaic virus</i>	-

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Zingiber*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Helicobasidium mompa*; Virus diseases

Entry Conditions: **Basic;** with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs:

PEQ: Level 1

Minimum Period: 3 months

Additional Declaration(s):

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

AND

- sourced from a “Pest free area” or “Pest free place of production”, free from *Helicobasidium mompa* OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

C. For Tissue Cultures:

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

PLUS:

Additional Declaration:

"The cultures have been derived from parent stock tested and found free of virus diseases."