Ministry for Primary Industries
Manatū Ahu Matua

MINISTRY FOR PRIMARY INDUSTRIES

STANDARD 155.02.06

Importation of Nursery Stock

Issued as an import health standard pursuant to section 24A of the Biosecurity Act 1993

Regulation & Assurance
Plants, Food & Environment Directorate
PO Box 2526
Wellington 6140, New Zealand
www.mpi.govt.nz

Growing and Protecting New Zealand

CONTENTS

ENDORSEMENT

This Ministry for Primary Industries standard is hereby approved. Pursuant to section 24A of the Biosecurity Act 1993, I hereby issue this document as an import health standard.

Signature of Manager, Plants Imports & Exports Group
Acting pursuant to delegated Director-General authority

Date: 8 March 2017

REVIEW

This standard is subject to periodic review. Amendments will be made to the signed original as required. The signed original will be held by the Plant Imports and Exports Group, Ministry for Primary Industries, Pastoral House, 25 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 are included below.

No:	Details:	Date:
1	Section 2.2.1.7 *Pesticide treatments for dormant bulbs*	27 April 2005
2	*Lilium* schedule of special conditions, sections 2.2.1.6, 2.2.1.7 and 2.2.2.	17 June 2005
3	*Ficus* schedule	6 September 2005
4	*Acacia, Acer, Allium, Canna, Cotoneaster, Cycas, Hippeastrum, Hydrangea, Iris,* and *Lilium* schedules	6 October 2005
5	*Acacia, Acer, Begonia, Canna, Cotoneaster* and *Hydrangea* schedules, section 2.2.1.7	8 February 2006
6	*Acer, Aesculus, Arbutus, Acacia, Calladium, Camellia, Castanea, Gaultheria, Fagus, Kalmia, Photinia, Prunus, Vaccinum* schedules, section 2.2.1.10, section 2.2.1.11	22 May 2006
7	*Actinidia, Hippeastrum* and *Prunus* schedules	9 August 2006
8	*Allium, Fragaria, Hippeastrum, Miscanthus, Solanum tuberosum,* and *Zantedeschia* schedules.	4 August 2008
9	*Corylus* and *Wollemia nobilis* schedules.	10 November 2008
10	*Allium*, *Persea*, *Rubus*, *Vaccinium*, and *Vaccinium macrocarpon* schedules.	7 April 2009
11	Sections 1.4, 2.2.1.8, 2.2.1.9, 2.2.1.11, 2.2.3, and 3	1 October 2009
12	Section 2.2.1.11	20 October 2009
13	*Tulipa* schedule	18 January 2010
14	*Prunus, Solanum tuberosum*, and *Vaccinium macrocarpon* schedules.	6 July 2010
15	*Allium* schedule	13 September 2010
16	*Berberis, Carpinus, Cotoneaster, Eucalyptus, Nandina, Olea, Populus, Pseudotsuga, Ulmus* schedules, section 2.2.1.10 and section 2.2.1.11	7 June 2011
17	*Phalaenopsis* schedule	8 August 2011
18	Removal of the schedules for *Acca sellowiana* and *Agonis, with* incorporation under the *Metrosideros* schedule. Amendment to the *Eucalyptus* and *Eugenia* schedules.	25 August 2011
19	*Dracaena* schedule	12 September 2011
20	*Malus* schedule	20 June 2012
21	*Artocarpus* schedule	29 June 2012
22	*Cycas, Dracaena, Fuchsia* schedules, section 2.2.1.10, 2.2.1.11, 2.2.3 and 2.3.3	16 August 2012
23	*Solanum tuberosum* schedule	8 April 2013
24	*Eucalyptus*, *Eugenia*, *Metrosideros* and *Vitis* schedules	22 May 2013
25	*Actinidia* schedule	6 September 2013

26	Section 2.2.2.2	27 January 2014
27	*Vitis* schedule	11 March 2014
28	*Rubus* schedule	21 March 2014
29	Section 2.3.2.1, section 2.2.1.11, schedules for *Allium, Begonia, Canna, Citrus, Crocus, Dahlia, Fortunella, Fragaria, Gladiolus, Hippeastrum, Lilium, Malus, Miscanthus x giganteus, Narcissus, Olea, Persea, Poncirus, Prunus, Rubus, Solanum tuberosum, Tulipa, Vaccinium, Vaccinium macrocarpon* and *Vitis*	11 June 2014
30	Schedules for *Chrysanthemum*, *Diascia*, *Dahlia* and *Solanum*	18 August 2014
31	Schedules for *Citrus*, *Fortunella*, *Fragaria*, *Malus* and *Poncirus*	27 November 2014
32	Schedules for *Hippeastrum* and *Vitis*	21 January 2015
33	Sections 2.2.1.6, 2.2.1.7 and 2.2.1.8 (new section for *Ceratocystis fimbriata*, with renumbering of subsequent sections). Schedules for *Acacia, Acrocomia, Carica, Carya, Carya ovata, Citrus, Delphinium, Eucalpytus, Fagus, Fagus sylvatica, Ficus, Fragaria, Juglans, Malus, Mangifera, Metrosideros, Platanus, Populus, Prunus, Quercus, Rubus, Tulipa, Ulmus, Vaccinium* and *Vitis*	10 December 2015
34	Schedules for *Fragaria, Malus, Olea, Prunus, Rubus, Solanum tuberosum, Vaccinium* and *Vitis*	11 March 2016
35	Section 2.2.1.12, and schedule for *Acacia*	06 May 2016
36	Section 2.2.1.13 (new section for *Phellinus noxius*, with renumbering of subsequent sections). Schedules for *Acacia, Acrocomia, Aesculus, Araucaria, Arbutus, Artocarpus, Camellia, Camellia sinensis, Cedrus, Citrus, Crataegus, Cycas, Delphinium, Diospyros, Eriobotrya, Eucalyptus, Eugenia, Ficus, Fortunella, Hebe, Hydrangea, Litchi, Mangifera, Metrosideros, Nandina, Persea, Planera, Poncirus, Populus, Prunus, Rhododendron, Rosa, Salix, Ulmus,* and *Vitis*	21 November 2016
37	Sections 1.3, 1.4, 2.2.1.12, 2.2.1.12, 2.3.2. Schedules for *Acacia, Acer, Acrocomia, Aesculus, Arbutus, Asparagus, Bidens, Canna, Carya, Carya ovata, Castanea, Citrus, Cotoneaster, Delphinium, Diospyros, Eucalyptus, Eugenia, Eupatorium, Fagus, Fagus sylvatica, Ficus, Fuchsia, Fortunella, Fragaria, Helianthus, Hebe, Humulus, Hydrangea, Ipomoea batatas, Juglans, Juniperus, Metrosideros, Nandina, Olea, Persea, Phoenix, Photinia, Platanus, Poncirus, Populus, Prunus, Pseudotsuga, Pyrus, Quercus, Ranunculus, Rosa, Rubus, Salix, Solanum tuberosum, Solidago, Ulmus, Vaccinium, Verbena* and *Vitis*	21 December 2016
38	Schedule for *Rosa*	22 December 2016

39	Sections 2.2.2.4, 2.2.2.5 (new section for *Xylella fastidiosa*), 2.2.2.6 (new section for post entry quarantine), and 2.3. Schedules for *Acacia, Acer, Acrocomia, Aesculus, Arbutus, Asparagus, Bidens, Canna, Carya, Carya ovata, Castanea, Cotoneaster, Delphinium, Diospyros, Eucalyptus, Eugenia, Eupatorium, Fagus, Fagus sylvatica, Ficus, Fuchsia, Hebe, Humulus, Hydrangea, Ipomoea batatas, Juglans, Malus, Metrosideros, Nandina, Phoenix, Photinia, Platanus, Populus, Prunus, Pseudotsuga, Quercus, Ranunculus, Rosa, Salix, Solanum tuberosum, Solidago, Ulmus, Vaccinium macrocarpon,* and *Verbena*	27 February 2017
40	Updated sections 1.3 and 1.4, and relevant schedules to align with commencement of Facility Standard: Post Entry Qurantine for Plants (MPI.STD.PEQ).	8 March 2017

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 for Primary Industries. All communication pertaining to this import health standard should be addressed to:

Ministry for Primary Industries
PO Box 2526
25 The Terrace
Wellington
NEW ZEALAND

Telephone: +64 4 894 5514
Fax: +64 4 894 0662
E-mail: plantimports@mpi.govt.nz
Website: http://www.mpi.govt.nz

1.2 SCOPE

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

1.3 REFERENCES

New Zealand legislation

- Biosecurity Act 1993
- Hazardous Substances and New Organisms Act 1996 (HSNO Act 1996)

Standards issued under the Biosecurity Act

The following standards can be accessed on the website:
http://www.mpi.govt.nz/importing/plants/nursery-stock/requirements

- Facility Standard: Post Entry Qurantine for Plants (MPI.STD.PEQ)
- Operational Standard PIT-OS-TRA-ACPQF: Accreditation of Offshore Plant Quarantine Facilities and Operators
- Diagnostic Facility Standard 155.04.03: A standard for diagnostic facilities which undertake the identification of new organisms, excluding animal pathogens

International Standard for Phytosanitary Measures (ISPM)

- ISPM 04. Requirements for the establishment of pest free areas
- ISPM 05. Glossary of phytosanitary terms
- ISPM 10. Requirements for the establishment of pest free places of production and pest free production sites
- ISPM 12. Phytosanitary certificates
- ISPM 20. Guidelines for a phytosanitary import regulatory system

- ISPM 24. Guidelines for the determination and recognition of equivalence of phytosanitary measures
- ISPM 27. Diagnostic protocols for regulated pests

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.

Consignment: A quantity of plants, plant products or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one of more commodities or lots) [FAO, 1990; revised ICPM, 2001]

Country of origin (of a consignment of plants): Country where the plants were grown [FAO, 1990; revised CEPM, 1996; CEPM, 1999]

Cuttings: A nursery stock commodity sub-class for propagation material from the stem only (no roots). Cuttings may be required to be dormant.

Dormant: Temporarily inactive/suspended growth (cuttings of deciduous species should have no leaves; bulbs should have no leaves or roots).

Environmental Protection Authority (EPA): Authority responsible for administering the Hazardous Substances and New Organisms Act 1996.

Free from (of a consignment, field or place of production): Without pests (or a specific pest) in numbers or quantities that can be detected by the application of phytosanitary procedures [FAO, 1990; revised FAO, 1995; CEPM, 1999]

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 the Ministry for Primary Industries).

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 (L1), Level 2 (L2), Level 3 (L3), Level 3A (L3A) or Level 3B (L3B) 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 MPI (see Facility Standard: Post Entry Quarantine for Plants [MPI.STD.PEQ]).

Lot: A number of units of a single commodity identifiable by its homogeneity of composition, origin etc., forming part of a consignment. [FAO, 1990].

MPI: The Ministry for Primary Industries, formerly the Ministry of Agriculture and Forestry (MAF).

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)].

Non-dormant: Normal state of plant growth, not in suspended growth.

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, rhizomes, and plants *in vitro*.

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: Living plants and parts thereof, including seeds and germplasm [FAO, 1990; revised IPPC, 1997]

Plants Biosecurity Index (PBI): A database of plant species that have been approved by EPA and may be imported provided they meet certain conditions. The PBI can be found at the following web address: MPI Plant Biosecurity Index

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; CEPM, 1999; ICPM, 2002 formerly plants in tissue culture].

Post Entry Quarantine (PEQ): The quarantine conditions [Level 1 (open field facility), Level 2 (aquarium, greenhouse, or tissue culture facility), Level 3 (tissue culture facility), Level 3A (greenhouse facility), Level 3B (greenhouse facility)] 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 MPI'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 Protection Authority (EPA) at the following address:

Environmental Protection Authority
PO Box 131
Wellington 6140
NEW ZEALAND

Phone: +64 4 916 2426
Fax: +64 4 914 0433
E-mail: info@epa.govt.nz
Website: http://www.epa.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 EPA. If EPA approves an application, MPI will undertake a pest risk analysis and develop an import health standard 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 MPI at the address given below.

The Ministry for Primary Industries can also be contacted for information on permit application procedures and import health standards. Address for the Plant Imports Team:

Plant Imports
Ministry for Primary Industries
P.O. Box 2526
Wellington 6140
NEW ZEALAND

Telephone: +64 4 894 0862
Fax: +64 4 894 0662
E-mail: plantimports@mpi.govt.nz
Website: http://www.mpi.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. To confirm whether is a specific species requires a CITES import permit, please contact the Department of Conservation (http://www.doc.govt.nz).

1.7 EQUIVALENCE

It is expected that the product will meet the conditions of this import health standard in every respect. If the product does not comply with the requirements, an application for equivalence may be submitted to MPI for consideration prior to importation. This must explain the reason(s) why the consignment may be considered of equivalent phytosanitary status to this import health standard, and what proposal is made to achieve an equivalent phytosanitary status.

2. IMPORT SPECIFICATION AND ENTRY CONDITIONS

2.1 INSPECTION ON ARRIVAL AND MAXIMUM PEST LIMIT

A randomly drawn sample of 600 units, from each homogenous lot within in a consignment, shall be inspected on arrival. Where a lot is comprised of less than 600 units, 100% inspection is required.

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 a 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

All imported nursery stock must comply with the following requirements:
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.
AND
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**.

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 for Permit to Import Nursery Stock" available from the Permit Office or on MPI's website:
http://www.mpi.govt.nz/importing/plants/nursery-stock/forms-and-templates/
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 MPI's "Biosecurity Organisms Register for Imported Commodities".

If a visually detectable pest is not listed in this register, the certifying NPPO must contact MPI (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, unless stated otherwise in the "schedule of special conditions":
"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 (^oC):

Rate (g/m^3)	Temperature (^oC)
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^{o}C for at least 2 hours, followed by immersion in hot water at a constant temperature of at least 45^{o}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 (0.8 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
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 (^oC) 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 four 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 (^oC):

Rate (g/m^3)	Temperature (^oC)
48	10 – 15
40	16 – 20
32	21 – 27
28	28 – 32

OR

(2) Actellic room fumigation: 10 cc Actellic/10m3 of room capacity for 12 hours at 20°C or higher. The first treatment should take place within 14 days after harvesting. Repeat the treatment two more times within an interval of 4 weeks.

OR

(3) Hot water treatment/chemical treatment: immersion in hot water at a constant temperature of 24ºC for 2 hours, followed by immersion in hot water at a constant temperature of 45ºC 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

(4) 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 four 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 (^oC) prescribed for insects above.

OR

(2) Actellic room fumigation: 10 cc Actellic/10m3 of room capacity for 12 hours at 20°C or higher. The first treatment should take place within 14 days after harvesting. Repeat the treatment two more times within an interval of 4 weeks.

OR

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

OR

(4) 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 (^oC) prescribed for insects above;

OR Hot water treatment: immersion in hot water at a constant temperature of 24^{o}C for 2 hours, followed by immersion in hot water at a constant temperature of 45^{o}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 24ºC for 2 hours, followed by immersion in hot water at a constant temperature of 45ºC 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 27-29.5ºC
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 *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand)

Note**:** The only known strain of *C. fimbriata* present in New Zealand is the *Ipomoea* strain, which is restricted to members of the *Ipomoea* genus.

All species of nursery stock (cuttings, whole plants, dormant bulbs and tubers) of the following genera must meet the requirements for Ceratocystis fimbriata sensu lato complex (strains not in New Zealand) identified in this section:

- *Acacia*
- *Actinidia*
- *Alocasia*
- *Ananas*
- *Annona*
- *Betula*
- *Carya*
- *Cassia*
- *Celtis*
- *Citrus*
- *Colocasia*
- *Corymbia*
- *Eriobotrya*
- *Erythrina*
- *Eucalyptus*
- *Fagus*
- *Ficus carica*
- *Inga*
- *Juglans*
- *Mangifera*
- *Metrosideros*
- *Metroxylon*
- *Ostrya*
- *Passiflora*
- *Pimenta*
- *Populus*
- *Protea*
- *Prunus*
- *Punica*
- *Quercus*
- *Shizolobium*
- *Schotia*
- *Spathodea*
- *Styrax*
- *Syngonium*
- *Tilia*
- *Ulmus*
- *Xanthosoma*

i) For countries recognised by MPI as free from *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand)

The following Additional Declaration shall be endorsed on the phytosanitary certificate: "The plants have been sourced from a country free from *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand)"

Note: Countries where *Ceratocystis fimbriata sensu lato* complex is known to be present: Australia, Brazil, Canada, China, Colombia, Congo, Costa Rica, Côte d'Ivoire, Cuba, Ecuador, Fiji, Guatemala, India, Indonesia, Jamaica, Japan, Kenya, Malawi, Malaysia, Mexico, Myanmar, Oman, Pakistan, Papua New Guinea, Poland, South Africa, Suriname, Taiwan, Tanzania, Thailand, Uganda, United States, Uruguay, Venezuela, Vietnam, Western Samoa, Zambia.

ii) For all other countries

The phytosanitary certificate must have the following additional declaration:
"The plants have been sourced from a state/province free from *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand) or from a Pest Free Place of Production free from *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand)"
AND
The plants must be tested for *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand) during the post entry quarantine period, at an MPI approved diagnostic facility.

iii) For nursery stock sourced from MPI approved offshore facilities

Specific measures are detailed in the agreement between MPI and the approved facility, or the plants must be tested for the *C. fimbriata sensu lato* complex (strains not in New

Zealand) during the post entry quarantine period, at an MPI approved diagnostic facility.

2.2.1.9 Measures for *Helicobasidium mompa*

ALL species of nursery stock (whole plants, cuttings, and dormant bulbs) from the listed countries must meet the requirements of this section, unless stated otherwise in the "schedule of special conditions".

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 3B 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
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 24ºC for 2 hours, followed by immersion in hot water at a constant temperature of 45ºC 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.

2.2.1.10 Measures for *Phymatotrichopsis omnivora*

ALL species of whole plants from the listed countries must meet the requirements of this section.

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*".

2.2.1.11 Measures for *Phytophthora ramorum*

All nursery stock imported under the schedules listed below, as well as the additional listed genera and/or species/cultivars, are potential hosts of Phytophthora ramorum and must meet the requirements specified in this section.

All species imported under the following schedules must meet the requirements for Phytophthora ramorum identified in this section:

- *Abies*
- *Acer*
- *Aesculus*
- *Arbutus*
- *Berberis*
- *Carpinus*
- *Castanea*
- *Corylus*
- *Cotoneaster*
- *Eucalyptus*
- *Fagus*
- *Fuchsia*
- *Gaultheria*
- *Kalmia*
- *Lithocarpus*
- *Olea*
- *Photinia*
- *Populus*
- *Prunus*
- *Pseudotsuga*
- *Quercus*
- *Rhododendron*
- *Rubus*
- *Salix*
- *Ulmus*
- *Vaccinium*
- *Viburnum*

All species of the following genera must meet the requirements for Phytophthora ramorum identified in this section:

- *Alnus*
- *Annona*
- *Betula*
- *Buddleja*
- *Celtis*
- *Cercis*
- *Ceratonia*
- *Chamaecyparis*
- *Chimaphila*
- *Choisya*
- *Cistus*
- *Citrus*
- *Clematis*
- *Cornus*
- *Corylopsis*
- *Distylium*
- *Empetrum*
- *Erica*
- *Garrya*
- *Gevuina*
- *Grevillea*
- *Ilex*
- *Hedera*
- *Hydrangea*
- *Larix*
- *Liriodendron*
- *Loropetalum*
- *Mahonia*
- *Malus*
- *Manglietia*
- *Nerium*
- *Picea*
- *Pistacia*
- *Ribes*
- *Robinia*
- *Rosa* cultivar Pink Meidiland
- *Rosa* cultivar Pink Sevillana
- *Rosa* cultivar Royal Bonica
- *Rosa gymnocarpa*
- *Rosa rugosa*
- *Rosa sempervirens*
- *Sambucus*
- *Tilia*
- *Zenobia*
- *Tsuga*

i) For countries recognised by MPI as free of *P. ramorum*

The following Additional Declaration shall be endorsed on the phytosanitary certificate: "The plants have been sourced from a "Pest free area", free from *Phytophthora ramorum*"

Note: The following countries are presently recognised by MPI as free of *Phytophthora ramorum*:
Australia, Israel, Japan, and South Africa.

ii) For countries with MPI approved programs (see below)

The following Additional Declaration shall be endorsed on the phytosanitary certificate: "The plants have been sourced from a NZ MPI approved Pest Free Place of Production for *Phytophthora ramorum*"

Note: No countries presently have MPI approved Pest Free Place of Production programmes for *Phytophthora ramorum*.

Countries wishing to export *P. ramorum* host material to New Zealand under option ii are required to develop a *P. ramorum* pest free place of production program and present it to MPI for evaluation. Prior to accepting a program MPI Plant Imports will evaluate whether they meet the criteria below:

- systems to establish and maintain pest freedom;
- systems to establish and maintain an appropriate buffer zone (as defined by ISPM 10);
- verification that pest freedom has been attained or maintained. This must include laboratory testing of propagative material, water, soil or other growing media, and other material coming into contact with propagative material; and
- product identity, consignment integrity and phytosanitary security.

iii) For nursery stock sourced from MPI approved offshore facilities

Specific measures are detailed in the agreement between MPI and the approved facility.

2.2.1.12 Measures for *Xylella fastidiosa*

The following measures only apply to nursery stock (whole plants, cuttings and dormant bulbs) identified within the schedule of special conditions as hosts of Xylella fastidiosa.

- There is a CTO direction (CTOPlants: 2016004) in place for all nursery stock from Costa Rica.

i) For countries recognised by MPI as free from *Xylella fastidiosa*

All phytosanitary certificates must be endorsed with the following additional declaration:

"**The plants in this consignment have only been grown in, and exported from, the country of origin [*insert country name*], which is free from *Xylella fastidiosa*"**

ii) For all other countries

'1. Additional declaration' AND '2. Pre-determined testing in post entry quarantine' must be met for nursery stock imported under this option.

1. **Additional declaration:**
All phytosanitary certificates must be endorsed with the following additional declaration:

"The plants in this consignment have only been grown in, and exported from, a "Pest free area" [*insert area name*] or "Pest free place of production" [*insert place name*], which is free from *Xylella fastidiosa*".

2. Pre-determined testing in post entry quarantine:
PEQ: Level 2 (unless a higher level of PEQ is required in the schedule of special conditions)
Minimum period: 6 months
The plants must be tested for *Xylella fastidiosa* during the PEQ period, at an MPI approved diagnostic facility, as described below:

- The minimum PEQ period will be 6 months, as this is the time required to complete growing inspections and testing for *Xylella fastidiosa*. For example:
  - For schedules which identify a minimum period of 3 months, the minimum PEQ period will be extended to 6 months
  - For schedules with a minimum period longer than 6 months, the longer period will apply.
- Samples must be collected and tested at the end of the summer (or 'summer-like') period;
  - The unit for testing is defined in section 2.3.2.1 "Pre-determined testing"
  - Plants shall be sampled from at least four positions; including a minimum of two young, fully expanded leaves at the top of the stem and two older leaves from a midway position
  - The samples must be tested by PCR for *Xylella fastidiosa*
  - All samples must test negative

iii) For nursery stock sourced from MPI approved offshore facilities
Specific measures are detailed in the agreement between MPI and the approved facility.

Guidance:
The following countries are not recognised by MPI as free from *Xylella fastidiosa*:

- **All countries in Europe, the America's and the Caribbean**
- **Asia**: India, Taiwan
- **Near East**: Iran

The full list of countries which are not recognised by MPI as free from *Xylella fastidiosa* can be viewed on the website: *Xylella fastidiosa*

2.2.1.13 Measures for *Phellinus noxius*

The following measures only apply to whole plants including rooted cuttings (not dormant bulbs or unrooted cuttings), identified within the schedule of special conditions as hosts of Phellinus noxius

i) For countries recognised by MPI as free from *Phellinus noxius*
The following Additional Declaration must be endorsed on the phytosanitary certificate:

"The plants have been sourced from a country free from *Phellinus noxius*"

ii) For all other countries

One of the following additional declarations must be endorsed on the phytosanitary certificate:

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

OR, for areas approved by MPI

b) "The plants have been sourced from a "Pest free area", [*insert area name*], free from *Phellinus noxius*".

Guidance:
Countries where *Phellinus noxius* is known to be present:

- **Africa:** Angola, Benin, Burkina, Cameroon, Central African Republic, Cote d'Ivoire Democratic Republic of Congo, Faso, Gabon, Ghana, Kenya, Liberia, Nigeria, Sierra Leone, Tanzania, Togo, Uganda
- **Asia:** Andaman Islands, China, Islands of China, East Indies, India, Indonesia, Islands of Japan, Malay Peninsula, Malaysia, Myanmar, Nicobar Islands, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Vietnam
- **Central America & Caribbean:** Brazil, Costa Rica, Cuba
- **Oceania:** American Samoa, Australia (NSW, Queensland), Fiji, Mariana Islands, New Guinea, Papua New Guinea, Samoa, Vanuatu

2.2.1.14 Post-Entry Quarantine

Following arrival in New Zealand all nursery stock, unless specified in the schedules of special entry conditions, must undergo a period of post entry quarantine (PEQ) in order to check for the presence of regulated pests and/or diseases.

PEQ will be carried out in a transitional facility registered in accordance with the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ). The nursery stock must be actively growing throughout the quarantine period. The quarantine period:

- Will be a minimum of 3 months for species with a nursery stock import specification of ' L2 (Basic)' as indicated in the Plants Biosecurity Index (PBI); or
- Will be the minimum period stated in the schedule of special entry conditions

The quarantine period may be extended if material is slow growing, pests and diseases are detected, testing or treatments required.

The MPI Inspector has full authority to determine when the plant material may receive biosecurity clearance.

A list of MPI-accredited post entry quarantine facilities is available on MPI's website: http://www.mpi.govt.nz/news-and-resources/resources/registers-and-lists/post-entry/

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 vessel (rigid container, bag or pottle) must be pest proof and transparent. The tissue culture medium 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 following additional declaration must be identified upon the phytosanitary certificate:

> "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 required when the schedule of special conditions states that:

- An import permit is a required document;
- The cultures require a period of growth in post entry quarantine;
- The cultures must meet the requirements of section 2.2.2.5 “Measures for *Xylella fastidiosa* on tissue culture” **and** the tissue cultures will be imported under section 2.2.2.5 part ii (requiring PEQ and pre-determined testing).

2.2.2.5 Measures for *Xylella fastidiosa* on tissue culture

The following measures only apply to nursery stock (tissue cultures) identified within the schedule of special conditions as hosts of Xylella fastidiosa.

Implementation of provisional measures:

- For consignments with a phytosanitary certificate issued on or after 1 June 2017, the requirements of this section must be met.
- For consignments with a phytosanitary certificate issued on or before 31 May 2017, the requirements of this section are not mandatory.

i) For countries recognised by MPI as free from *Xylella fastidiosa*

OPTION 1: ***Both the tissue cultures AND the mother plants have only been grown in the country of origin, AND this can be certified by the exporting NPPO.***

All phytosanitary certificates must be endorsed with the following additional declaration:

> **"The tissue cultures/plants in-vitro in this consignment, and the plants they were derived from, have only been grown in the country of origin,** [insert country name]**, which is free from *Xylella fastidiosa*".**
>
> **Note:** PEQ is not required for tissue cultures imported under this option, unless PEQ is a requirement of the schedule of special entry conditions.

OPTION 2: ***The country of origin of the mother plants is <u>not</u> the same as the country of origin of the tissue cultures.***

The tissue cultures must meet the requirements for tissue cultures from all other countries.

ii) For all other countries

'1. Additional declaration' AND '2. Pre-determined testing in post entry quarantine' must be met for tissue cultures imported under this option.

1. Additional declaration:

All phytosanitary certificates must be endorsed with the following additional declaration:

> **"The tissue cultures/plants in-vitro in this consignment, and the plants they were derived from, have only been grown in a "Pest free area"** [insert area name] *or* **"Pest free place of production"** [insert place name]**, which is free from *Xylella fastidiosa*".**

2. Pre-determined testing in post entry quarantine:

PEQ: Level 2 (unless a higher level of PEQ is required in the schedule of special conditions)

Minimum period: 6 months (in the PEQ greenhouse)

The plants must be tested for *Xylella fastidiosa* during the PEQ period, at an MPI approved diagnostic facility, as described below:

- The minimum PEQ period will be 6 months, as this is the time required to complete growing season inspections and testing for *Xylella fastidiosa*. For example:
  - For schedules which identify a minimum period of 3 months, the minimum PEQ period will be extended to 6 months
  - For schedules with a minimum period longer than 6 months, the longer period will apply.
- Samples must be collected and tested at the end of the summer (or 'summer-like') period;
  - The unit for testing is defined in section 2.3.2.1 "Pre-determined testing".
  - Plants shall be sampled from at least four positions; including a minimum of two young, fully expanded leaves at the top of the stem and two older leaves from a midway position.
  - The samples must be tested by PCR for *Xylella fastidiosa*
  - All samples must test negative

iii) For nursery stock sourced from MPI approved offshore facilities

Specific measures are detailed in the agreement between MPI and the approved facility.

Guidance:

The following countries are not recognised by MPI as free from *Xylella fastidiosa*:

- **All countries in Europe, the America's and the Caribbean**
- **Asia**: India, Taiwan
- **Near East**: Iran

The full list of countries which are not recognised by MPI as free from *Xylella fastidiosa* can be viewed on the website: *Xylella fastidiosa*

2.2.2.6 Post-Entry Quarantine for tissue cultures

Tissue cultures only require a period of post entry quarantine in order to check for the presence of regulated pests and/or diseases when the schedule of special conditions states:

- The cultures require a period of growth in post entry quarantine; AND/OR
- The cultures must meet the requirements of section 2.2.2.5 "Measures for *Xylella fastidiosa* on tissue culture" **and** will be imported under section 2.2.2.5 part ii (requiring PEQ and pre-determined testing).

Post entry quarantine will be carried out in a transitional facility registered in accordance with the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ). The nursery stock must be actively growing throughout the quarantine period. The quarantine period:

- Will be the minimum period stated in the schedule of special entry conditions, which may be extended if pre-determined testing is required.
- May be extended if material is slow growing, pests and diseases are detected, testing or treatments required.

Tissue cultures must be deflasked into a PEQ greenhouse for the completion of growing season inspections and testing, unless the schedule of special conditions states that they must be held in a PEQ Tissue culture laboratory:

- For tissue cultures that must be held in a PEQ Tissue culture laboratory for the duration of the PEQ period, the quarantine period will begin when the plants arrive at the PEQ facility and are held under the conditions specified in the schedule of special conditions (e.g. temperature requirements). Sub-culturing during the PEQ period must not occur.
- For tissue cultures that must be grown in a PEQ greenhouse, the quarantine period will begin when the plants are deflasked in the greenhouse. Prior to deflasking tissue cultures into the PEQ greenhouse, individual imported tissue culture plantlets may be sub-cultured to enable multiplication of tissue-cultured plant material during the PEQ period, as described below.
  - At least one sub-culture must be developed to the stage where it can be deflasked and transferred to the glasshouse for the completion of growing season inspections and testing. In cases where only one culture is obtained from the first round of sub-culturing, a culture for deflasking must be taken during the first appropriate multiplication. Traceability must be maintained to the individual imported tissue culture plantlet.
  - Other subcultures derived from the same individual imported tissue culture plantlet may be kept in culture at a PEQ Tissue culture laboratory, and may be multiplied further during the PEQ period. The level of PEQ Tissue culture laboratory must be the same (or higher) as that required for the greenhouse plants; however, a Level 3 tissue culture laboratory is suitable for species which require either a Level 3A or 3B PEQ greenhouse. Provided traceability to the individual imported tissue culture plantlet (and greenhouse plant) is maintained, this progeny may also be given biosecurity clearance.

The MPI Inspector has full authority to determine when the plant material may receive biosecurity clearance.

2.2.3 IMPORTATION OF POLLEN

The schedule of special conditions must list pollen as an approved commodity type for importation to occur under this section

An import permit must be obtained from MPI prior to import. Prior to issuing the permit to import, MPI will assess, on a case by case basis, the requirements that must be met to import the pollen. All import requirements will be detailed on the permit to import.

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.

Visual inspection of 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.

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, MPI reserves the right to validate all measures that are undertaken overseas. This includes measures undertaken by national plant protection organisations, MPI-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 labelling 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 MPI.

All testing and treatment in New Zealand must be completed in MPI-accredited facilities, accredited to Diagnostic Facility Standard 155.04.03: A standard for diagnostic facilities which undertake the identification of new organisms, excluding animal pathogens and BMG-STD-TREAT: Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export, respectively.

2.3.2.1 Pre-determined testing

The schedule of special entry conditions identifies when pre-determined testing is required for plant material being held in post entry quarantine. For material which requires pre-determined testing, the unit for testing is defined as follows:

The unit for testing is an individual imported plantlet (imported *in vitro*) or cutting. Each plantlet or cutting must be labelled individually and tested separately, with the following exceptions:

Polymerase chain reaction (PCR)

Samples taken from up to five plants being grown in post entry quarantine can be combined to form a single composite sample for pre-determined testing by PCR, provided that the plants are derived from:

(i) A single imported plantlet or cutting; or
(ii) Multiple plantlets or cuttings derived from the same offshore mother plant; or
(iii) Different mother plants of the same species.

Enzyme-linked immunosorbent assay (ELISA)

Samples taken from up to five plants being grown in post entry quarantine can be combined to form a single composite sample for pre-determined testing by ELISA, provided that the plants are derived from:

(i) A single imported plantlet or cutting; or
(ii) Multiple plantlets or cuttings derived from the same mother plant, where the phytosanitary certificate is endorsed with an additional declaration certifying that the plantlets/cuttings have been derived from the same mother plant.

Graft (woody) indexing

Where prior permission is received from MPI, samples taken from up to five plants being grown in post entry quarantine can be combined to form a single composite sample for pre-determined testing by graft indexing, provided that the plants are derived from:

(i) A single imported plantlet or cutting; or

(ii) Multiple plantlets or cuttings derived from the same mother plant, where the phytosanitary certificate is endorsed with an additional declaration certifying that the plantlets/cuttings have been derived from the same mother plant.

2.3.3 BIOSECURITY CLEARANCE

A biosecurity clearance, under section 26 of the Biosecurity Act, may be given when the nursery stock meets the requirements of this standard. There are other restrictions in section 27 and 28 of the Biosecurity Act on the giving of biosecurity clearances i.e. compliance with an import health standard or import permit does not guarantee biosecurity clearance will be given. As per Section 27 of the Biosecurity Act, biosecurity clearance will not be given if an inspector considers that the nursery stock is infected, or is showing signs of being infected, with organisms that may be unwanted organisms, or the inspector considers there has been a change in circumstances, or in the state of knowledge, that makes it unwise to give biosecurity clearance.

For nursery stock imported under an import permit, should there be a change in circumstances or the state of knowledge, the import permit will be amended to identify the requirements that must be met before the consignment will be eligible for biosecurity clearance. This may include, but is not limited to, a change in the pest host status of the nursery stock, a change in the distribution or virulence of a pest, or the availability of a new or improved test method.

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 a specified Level of PEQ (e.g. L1, L2, L3, L3A, L3B)
- 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 MPI-accredited (registered) facilities overseas under predetermined conditions, with a reduced PEQ requirement following arrival in New Zealand. Overseas facilities must be accredited by MPI according to the Standard PIT-OS-TRA-ACPQF: Accreditation of Offshore Plant Quarantine Facilities and Operators. A list of MPI-accredited offshore facilities is available on MPI's website: http://mpi.govt.nz/news-and-resources/resources/registers-and-lists/offshore/

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 MPI's website:

The information provided within the website 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 MPI to confirm import status.

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:

Approved 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 3B
Minimum Period: 6 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

B. For Tissue Cultures:
As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MPI-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 *Acacia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Ceratocystis fimbriata; Phellinus noxius; Phytophthora ramorum; Xylella fastidiosa*

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

A. For Whole Plants
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Acacia* and *Passiflora* genera

b. Conditions for Phytophthora ramorum (section 2.2.1.11)
Note: Only applies to the following species: *Veronica spicata*

c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

d. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Artemisia capillaris; Artemisia princeps; Duranta repens; Nerium oleander;* **and** applies to all members of the *Acacia* genus

B. For Cuttings
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Acacia* and *Passiflora* genera

b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
Note: Only applies to the following species: *Veronica spicata*

c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

C. For Plants in Tissue Culture from All Countries:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved Countries: All

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

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

A. For Cuttings and Whole Plants
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11), and

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12), and
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

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

OR
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

B. For Plants in Tissue Culture from All Countries:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved Countries: Australia, Hawaii, mainland USA

Quarantine Pests: *Ceratocystis fimbriata*, Lethal yellowing; cadang-cadang, *Phellinus noxius; Xylella fastidiosa*

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

A. For Whole Plants and Cuttings
PEQ: Level 2
Minimum Period: 3 months
Height Limit: Plants must not exceed 1.5m in height

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Metroxylon* genus

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to members of the *Phoenix* genus
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Areca catechu; Areca triandra; Chrysalidocarpus lutescens; Coco nucifera; Elaeis guineensis; Roystonea regia*

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

A. For Plants in Tissue Culture
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Note: Only applies to members of the *Phoenix* genus
Guidance for importers: The minimum quarantine period will be 6 months for tissue cultures sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. 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*".

The schedule of special entry conditions for *Actinidia* nursery stock has been suspended dated 6 September 2013. This means that *Actinidia* nursery stock is not eligible for import into New Zealand, including into post entry quarantine.

The MPI Chief Technical Officer believes, on reasonable grounds, that knowledge has changed in such a way that the requirements in the import health standard 155.02.06: Importation of Nursery Stock, regarding *Actinidia* spp. nursery stock, no longer enable the purposes of the Biosecurity Act 1993 (Part 3) to be achieved.

MPI is undertaking an Import Risk Analysis and review of the import requirements for *Actinidia* nursery stock. The schedule of special entry conditions for *Actinidia* nursery stock will be reinstated at such time as the MPI Chief Technical Officer believes on reasonable grounds that the reviewed import health standard will enable the purposes the Biosecurity Act 1993 (Part 3) to be achieved.

Questions related to this suspended schedule should be directed to:

Plant Imports Team
Ministry for Primary Industries
PO Box 2526
Wellington
NEW ZEALAND
plantimports@mpi.govt.nz

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:

Approved Countries: All

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

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Fraxinus griffithii; Rhus succedanea*

B. For Cuttings
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

C. Plants in Tissue Culture from All Countries:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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 for Primary Industries (MPI) 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" (country freedom), 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

- 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

- sourced from a "pest free area" (country freedom) free from the organisms listed below:
  - **Phytoplasmas:**
    Aster yellows phytoplasma, Garlic decline phytoplasma, and Onion yellows phytoplasma.
  - **Viruses:**
    Garlic dwarf virus, Garlic mite-borne latent virus, Garlic virus X, Onion mite-borne latent virus, Shallot yellow stripe virus, Sint-Jan's onion latent virus and *Tobacco rattle virus.*
  - **Bacteria:**
    Erwinia chrysanthemi pv. Chrysanthemi, Burkholderia cepacia, and *Pseudomonas xanthochlora.*

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 endorsing the following additional declarations to the phytosanitary certificate:

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

- **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

- **from a "Pest free area" (country freedom), free from regulated phytoplasmas (Aster yellows phytoplasma, Garlic decline phytoplasma and Onion yellows phytoplasma), viruses (*Garlic dwarf virus, Garlic mite-borne latent virus, Garlic virus X, Onion mite-borne latent virus, Shallot yellow stripe virus, Sint-Jan's onion latent virus* and *Tobacco rattle virus*), and bacteria (*Erwinia chrysanthemi pv. Chrysanthemi, Burkholderia cepacia* and *Pseudomonas xanthochlora*)."**

(v) *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.

(vi) *Assessment of Equivalent Phytosanitary Status*

Where the pre-export phytosanitary requirements (part ii) can not be met, a request for assessment of equivalent phytosanitary status can be made to MPI.

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: a 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 for Primary Industries (MPI) 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

- sourced from a "pest free area" (country freedom) free from the organisms listed below:

- **Phytoplasmas:**
  Aster yellows phytoplasma, Garlic decline phytoplasma and Onion yellows phytoplasma.
- **Viruses:**
  Garlic dwarf virus, Garlic mite-borne latent virus, Garlic virus X, Onion mite-borne latent virus, Shallot yellow stripe virus, Sint-Jan's onion latent 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 *Allium* tissue cultures in this consignment have been sourced from a "Pest free area" (country freedom), free from regulated phytoplasmas (Aster yellows phytoplasma, Garlic decline phytoplasma and Onion yellows phytoplasma) and viruses (*Garlic dwarf virus, Garlic mite-borne latent virus, Garlic virus X, Onion mite-borne latent virus, Shallot yellow stripe virus, Sint-Jan's onion latent virus* and *Tobacco rattle virus*)."**

(v) *Post-entry quarantine*

Post-entry quarantine is not required, provided that the pre-export phytosanitary requirements are completed, and the phytosanitary certificate is endorsed with the required additional declaration (part iv).

(vi) *Assessment of Equivalent Phytosanitary Status*

Where the pre-export phytosanitary requirements (part iii) can not be met, a request for assessment of equivalent phytosanitary status can be made to MPI.

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	
Helicotylenchus indicus	sprial nematode
Helicotylenchus microlobus	spiral nematode
Helicotylenchus multicinctus	spiral nematode

Hoplolaimus seinhorsti	lance nematode
Rotylenchulus reniformis	reniform nematode
Meloidogynidae	
Meloidogyne arenaria	peanut root knot nematode
Meloidogyne chitwoodi	root knot nematode
Tylenchidae	
Ditylenchus dipsaci [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
Pseudomonadaceae	
Burkholderia cepacia	sour skin
Pseudomonas xanthochlora	-
Virus	
Garlic dwarf virus	-
Garlic mite-borne latent virus	-
Garlic virus X	-
Onion mite-borne latent virus	-
Shallot yellow stripe virus	-
Sint-Jan's onion latent virus	-
Tobacco rattle virus [strains not in New Zealand]	-
Phytoplasma	
Aster yellows phytoplasma	-
Garlic decline phytoplasma	-
Onion yellows phytoplasma	-

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:

Approved 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 MPI-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 MPI-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.

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:

Approved 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

a. **Additional Declarations:** "*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".

b. "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:

Approved 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.

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:

Approved 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.

Anubias

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:

Approved 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
MPI 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

Araucaria

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 *Araucaria*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Phellinus noxius*

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phellinuis noxius* (section 2.2.1.13)

B. For Cuttings:
PEQ: Level 2
Minimum Period: 3 months

C. 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 *Arbutus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

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

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

A. For Whole Plants:

PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the members of the *Laurus* and *Magnolia* genera
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Applies to the following species: *Michelia compressa; Michelia figo; Osmanthus fragans*; **and** applies to all members of the *Cinnamomum* genus

B. For Cuttings:

PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the members of the *Laurus* and *Magnolia* genera
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

C. For Plants in Tissue Culture from All Countries:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Note: Only applies to the members of the *Laurus* and *Magnolia* genera
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved 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 3B
Minimum Period: 3 months

Note: These 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 *Artocarpus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Phellinus noxius*

Type of *Artocarpus* nursery stock approved for entry into New Zealand
Tissue culture

Entry conditions: 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 *Arum*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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:

Approved Countries: All

Quarantine Pests: *Puccinia asparagi*; virus diseases; *Xylella fastidiosa*

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

For Whole Plants:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

B. For Tissue Culture:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: The minimum quarantine period will be 6 months for tissue cultures sourced from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved 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".

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:

Approved 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 *Begonia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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: 3 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 MPI-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 bulb certification scheme."
OR
2) For bulbs NOT produced under a MPI-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 <u>other than</u> 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:

Approved Countries: All

Quarantine Pests: Uredinales*; Phytophthora ramorum*

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

a. Conditions for *Phytophthora ramorum* (see Section 2.2.1.11)

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".

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:

Approved Countries: All

Quarantine Pests: *Xylella fastidiosa*

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

A. For Cuttings and Whole Plants
PEQ: Level 2
Minimum period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Additional declaration: "The plants have been dipped in Furalaxyl at the rate of 0.25g a.i. per litre of water."

B. For Plants in Tissue Culture from All Countries:

c. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved Countries: All except Australia and Italy

Quarantine Pests: *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

B. For Plants in Tissue Culture:
As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

Caladium

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 *Caladium*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: Caladium virus X

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 free of Caladium virus X."

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:

Approved 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.

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:

Approved 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: *Phellinus noxius; Phytophthora ramorum*; *Tetranychus kanzawai*

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

A. For Whole Plants

PEQ: Level 2
Minimum Period: 3 months
Note: All visible flower buds are to be removed prior to export.

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Camellia japonica*

c. Additional declaration:
"The plants have been dipped in prochloraz at the rate of 0.5g a.i. per litre of water".

B. For Cuttings

PEQ: Level 2
Minimum Period: 3 months
Note: All visible flower buds are to be removed prior to export.

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Additional declaration:
"The plants have been dipped in prochloraz at the rate of 0.5g a.i. per litre of water".

C. 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:

Approved Countries:	Afghanistan	Iran	Mongolia	Syria
	Armenia	Iraq	Myanmar	Taiwan
	Azerbaijan	Israel	Nepal	Tajkistan
	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*; *Phellinus noxius;* Phloem necrosis; *Phytophthora ramorum*; *Tetranychus kanzawai.*

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

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

B. For Tissue Culture:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

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:

Approved Countries: All

Quarantine Pests: Virus diseases; *Xylella fastidiosa*

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

A. For Whole Plants
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)

B. For Dormant Bulbs from Australia and South Africa:

OPTION 1:
No import permit is required.
PEQ: None

a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)
Note: Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

b. Additional declaration "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

a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12) For countries recognised as free from Xylella fastidiosa only)
Note: Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

C. For Dormant Bulbs from Countries other than in B

OPTION 1:
PEQ: Level 1
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)
Note: Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

b. Treatment; 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

c. Additional declaration: "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."

OPTION 2:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

D. For Tissue Cultures from All Countries:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. 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:

Approved 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 mosaic virus* and *Papaya ringspot virus*."

OPTION 2:
For Whole Plants and Tissue Cultures:
PEQ: Level 3B
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:

Approved Countries: All

Quarantine Pests*: Phytophthora ramorum*

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

a. Conditions for *Phytophthora ramorum* (see Section 2.2.1.11)

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:

Approved Countries: Australia, USA

Quarantine Pests: *Ceratocystis fimbriata*, *Fusicladium effusum*, Pecan bunch, *Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Carya* genus

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to members of the *Carya* genus

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

B. For Plants in Tissue Culture:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Note: Only applies to members of the *Carya* genus

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

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:

Approved Countries: All

Quarantine Pests: *Ceratocystis fimbriata; Cryphonectria parasitica; Xylella fastidiosa*

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

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Carya and Ostrya genera*

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the members of the *Liriodendron* genus
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

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

OPTION 2:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Carya and Ostrya genera*

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the members of the *Liriodendron* genus

B. For Tissue Cultures from All Countries:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Note: Only applies to members of the *Liriodendron* genus
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. Subject to examination at a MPI-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 *Castanea*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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 carinife; Curculio* spp.; *Ceratocystis fagacearum; Cryphonectria parasitica; Dryocosmus kuriphilus; Phytophthora ramorum; Xylella fastidiosa*

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

A. For Whole Plants (dormant) and Cuttings (dormant):
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Cryphonectria parasitica* and *Ceratocystis fagacearum*: Additional declaration:
- "*Cryphonectria parasitica* and *Ceratocystis fagacearum* are not known to occur in ___ (the country/ 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."

B. For Plants in Tissue Culture:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Cryphonectria parasitica* and *Ceratocystis fagacearum*: Additional declaration:
- "*Cryphonectria parasitica* and *Ceratocystis fagacearum* are not known to occur in ___ (the country/ state where the plants were grown) ___",

OR
- "The plants were inspected (or the tissue cultures were derived from a tree that was inspected) during the previous growing season and no *Cryphonectria parasitica* or *Ceratocystis fagacearum* was detected."

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:

Approved Countries: All

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

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

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Chamaecyparis formosensis; Cupressus lusitanica*

B. For Tissue Cultures:
As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MPI-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 *Chrysanthemum*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

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

Quarantine Pests: *Potato spindle tuber viroid*[1], 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:
"The nursery stock in this consignment has been sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Potato spindle tuber viroid*.
AND
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.
PLUS
Additional Declaration: "The cultures have been derived from parent stock sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Potato spindle tuber viroid*".
OR
"The cultures have been derived from parent stock tested by PCR and found free from *Potato spindle tuber viroid*".

[1] Requirements for *Potato spindle tuber viroid* will commence on 1 September 2014:
All phytosanitary certificates issued on or after 1 September 2014 must be endorsed with the correct additional declarations for *Potato spindle tuber viroid*.

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:

Approved 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 MPI-accredited facilities (quarantine stations)

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Citrus*, the accredited facility operator must also have an agreement with MPI 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 MPI 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 MPI 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 MPI (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 MPI-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 MPI, 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 MPI 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. Plants must be held at 18-25°C throughout the quarantine period.
Quarantine Period: This is the time required to complete inspections and/or indexing to detect regulated pathogens. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required. Indicative minimum quarantine periods are:

- 6 months for *Citrus* cuttings sourced from mother plants that have been kept in insect proof plant houses, which may be extended to 12 months to allow for testing to be completed; or
- 16 months for *Citrus* cuttings sourced directly from open ground mother plants.

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 MPI 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 MPI (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 MPI, and to conform with the current phytosanitary requirements of MPI."

(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 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 MPI-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 3B MPI-accredited facility. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(v) *Post-entry quarantine*
PEQ: Level 3B
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 MPI-accredited facilities

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Citrus*, the accredited facility operator must also have an agreement with MPI 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 MPI 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 MPI 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 MPI (refer to the pest list).

AND

- held and tested for/classified free from specified regulated pests at a MPI-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 MPI, 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 MPI 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 MPI 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 MPI (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 MPI, and to conform with the current phytosanitary requirements of MPI."

(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 MPI-accredited facility. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(vi) *Post-entry quarantine*

PEQ: Level 3B

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]	-
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.	-

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

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

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

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

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

Eumeta japonica	-
Eumeta minuscula	tea bagworm
Eumeta moddermanni	-
Hyalarcta huebneri	leaf case moth
Pyralidae	
Apomyelois ceratoniae	date pyralid
Tortricidae	
Adoxophyes sp.	-
Amorbia cuneana	leafroller
Archips argyrospilus	fruit tree leafroller
Archips machlopis	leafroller
Archips occidentalis	leafroller
Archips rosanus	rose leafroller
Argyrotaenia citrana	orange tortrix
Cacoecimorpha pronubana	carnation leafroller
Cryptophlebia batrachopa	-
Cryptophlebia leucotreta	false codling moth
Homona magnanima	oriental tea tortrix
Isotenes miserana	orange fruitborer
Platynota stultana	omnivorous leafroller
Tortrix capensana	tortricid moth
Yponomeutidae	
Prays citri	citrus flower moth
Prays parilis	citrus flower moth
Neuroptera	
Chrysopidae	
Chrysopa oculata [Animals Biosecurity]	-
Coniopterygidae	
Coniopteryx vicina [Animals Biosecurity]	-
Conwentzia barretti [Animals Biosecurity]	-
Orthoptera	
Acrididae	
Zonocerus elegans	elegant grasshopper
Gryllidae	
Ornebius kanetataki	cricket
Tettigoniidae	
Caedicia sp.	-
Holochlora japonica	Japanese broadwinged katydid
Microcentrum retinerve	smaller angular-winged katydid
Scudderia furcata	fork-tailed bush katydid
Psocoptera	
Archipsocidae	
Archipsocus sp.	bark louse
Thysanoptera	
Aeolothripidae	
Franklinothrips vespiformis [Animals Biosecurity]	-
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Leptothrips mali	black hunter thrips
Scirtothrips aurantii	citrus thrips
Scirtothrips citri	citrus thrips
Scirtothrips dorsalis	chilli thrips
Scirtothrips mangiferae	mango thrips
Scolothrips sexmaculatus [Animals Biosecurity]	-
Taeniothrips kellyanus	-
Taeniothrips sp.	-
Thrips coloratus	thrips
Thrips flavus	flower thrips
Thrips palmi	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	Texus 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	
Achatina immaculata	-
Lissachatina immaculata	snail
Bradybaenidae	
Acusta despecta sieboldiana	snail
Subulinidae	
Rumina decollata	snail
Urocyclidae	
Urocyclus flavescens	-
Urocyclus kirkii	-
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe rudis (anamorph *Phomopsis rudis*)	phomopsis canker
Dothideales	
Elsinoaceae	
Elsinoe australis	sweet orange scab
Capnodiaceae	
Capnodium citri	sooty mould
Didymosphaeriaceae	
Didymosphaeria sp.	--
Microascales	
Ceratocysticaceae	
Ceratocystis fimbriata	-
Mycosphaerellaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*) [black spot strain]	citrus black spot
Mycosphaerella citri (anamorph *Stenella citri-grisea*)	rind blotch
Mycosphaerella horii	greasy spot
Patellariales	
Patellariaceae	
Rhytidhysteron rufulum	--
Saccharomycetales	
Saccharomycetaceae	
Debaryomyces hansenii	-
Galactomyces citri-aurantii (anamorph *Geotrichum citri-aurantii*)	sour rot
Basidiomycota: Agaricomycetes	
Hymenochaetales	
Hymenochaetaceae	
Phellinus noxius	brown root rot
Basidiomycota: Basidiomycetes	
Boletales	
Coniophoraceae	
Coniophora eremophila	brown wood rot
Basidiomycota: Teliomycetes	
Septobasidiales	
Septobasidiaceae	
Septobasidium pseudopedicellatum	felt fungus
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
Sphaceloma fawcettii var. *scabiosa*	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Macrophoma mantegazziana	-

Phoma erratica var. *mikan*	--
Phoma tracheiphila	mal secco
Phomopsis sp.	rot
Septoria spp.	-
Sphaeropsis tumefaciens	stem gall
Unknown Coelomycetes	
Unknown Coelomycetes	
Aschersonia placenta [Animals Biosecurity]	--
Gloeosporium foliicolum	fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria limicola	-
Alternaria pellucida	--
Cercospora microsora	-
Phaeoramularia angolensis	cercospora spot
Stemphylium rosarium	--
Ulocladium obovoideum	ulocladium rot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Aureobasidium sp.	-
Hirsutella thompsonii [Animals Biosecurity]	--
Isaria sp. [Animals Biosecurity]	-
Oidium tingitaninum	powdery mildew
Sporobolomyces roseus	--
Stenella sp.	--
Zygomycota: Zygomycetes	
Glomales	
Glomaceae	
Glomus etunicatum [Animals Biosecurity]	--
Mucorales	
Syncephalastraceae	
Syncephalastrum racemosum	--
Bacterium	
Bacterium family unknown	
Liberobacter africanum	citrus greening bacterium
Liberobacter asiaticum	citrus greening bacterium
Liberobacter sp.	citrus greening bacterium
Spiroplasma citri	citrus stubborn
Pseudomonadaceae	
Burkholderia cepacia	sour skin
Xanthomonas axonopodis pv. *citri*	citrus canker
Xanthomonas campestris pv. *aurantifolii*	-
Xanthomonas campestris pv. *citrumelo*	citrus bacterial spot
Xylella fastidiosa	Pierce's disease
Xylella fastidiosa pv. *citri*	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 [Natsudaidai dwarf strain]	-
xyloporosis viroid	-
yellow vein clearing of lemon	-

Phytoplasma

Candidatus 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 impietratura disease	-
citrus sunken vein disease	-
concave gum	-
cristacortis	-
gum pocket	-
gummy bark	-
kassala disease	-
lemon sieve tube necrosis	-
shell bark of lemons	-
zonate chlorosis	-

Inspection, Testing and Treatment Requirements for *Citrus**

ORGANISM TYPES	MPI 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	
Burkholderia cepacia	Growing season inspection for symptom expression.
Liberobacter africanum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
Liberobacter asiaticum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
Spiroplasma citri	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.
Xanthomonas axonopodis pv. *citri*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xanthomonas campestris pv. *aurantifolii*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xanthomonas campestris pv. *citrumelo*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xylella fastidiosa	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
Xylella fastidiosa pv. *citri*	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, *Citrus excelsa*, 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 *Citrus excelsa*. 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.

ORGANISM TYPES	MPI ACCEPTABLE METHODS
satsuma dwarf nepovirus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus [Natsudaidai 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 *Citrus excelsa*. 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 *Citrus macrophylla.*
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 *Citrus excelsa*. Grow indicators at cool temperatures 18 to 25°C.
cristacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or *Citrus excelsa*. Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or *Citrus excelsa*. 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	
Candidatus 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 defined in section 2.3.2.1.
2. With prior notification, MPI will accept other internationally recognised testing methods.

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 C*livia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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:

Approved 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) _____".

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:

Approved Countries: All

Quarantine Pests: *Anisogramma anomala*; *Monilinia fructigena*; *Phytophthora ramorum*

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

A. Whole Plants
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

B. Tissue Cultures:
PEQ: Level 3B
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:

Approved Countries: All

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

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

A. For Cuttings and Whole Plants
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (see section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from Xylella fastidiosa

c. Conditions for *Gymnosporangium* rusts, additional declaration:
– "*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".

d. Additional declaration: "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 from All Countries:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved 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; Phellinus noxius*

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

A. For Whole Plants:

OPTION 1
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to members of the *Crataegus* genus

b. Additional declaration:
"*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) _".

c. Additional declaration:
"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 3B
Minimum Period: 3 months

a. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to members of the *Crataegus* genus

B. For Tissue Cultures:
As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MPI-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 *Crocosmia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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:

Approved 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 MPI-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 bulb certification scheme."
OR
2) For bulbs NOT produced under a MPI-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 <u>other than</u> 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."

Cycas

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 *Cycas*".

GENERAL CONDITIONS:

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

Quarantine Pests: *Aulacaspis yasumatsui*, *Demyrsus meleoides*, *Phellinus noxius*

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 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 *Dahlia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Phymatotrichopsis omnivora*; *Potato spindle tuber viroid*[1]; *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. "The nursery stock in this consignment has been sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Potato spindle tuber viroid".*
AND
2. "Rust diseases are not known to occur on *Dahlia* in _ (the country in which the plants were grown) _".
AND
3. "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 MPI-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 bulb certification scheme.
AND
The bulbs have been sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Potato spindle tuber viroid*".
OR
2) For bulbs NOT produced under a MPI-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,

[1] Requirements for *Potato spindle tuber viroid* will commence on 1 September 2014:
All phytosanitary certificates issued on or after 1 September 2014 must be endorsed with the correct additional declarations for *Potato spindle tuber viroid*.

and considered free of quarantine pests, and practically free from other injurious pests."
AND
The bulbs have been sourced from a “Pest free area” or “Pest free place of production” [choose one], free from *Potato spindle tuber viroid*".

OPTION 2:
PEQ: Level 1
Minimum Period: 3 months
Additional Declaration(s):
The bulbs have been sourced from a “Pest free area” or “Pest free place of production” [choose one], free from *Potato spindle tuber viroid*".

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".
AND
2. The dormant bulbs have been sourced from a “Pest free area” or “Pest free place of production” [choose one], free from *Potato spindle tuber viroid*".
AND
3.i) "The dormant tubers have been sourced from a “Pest free area”, free from *Phymatotrichopsis omnivora*".
OR
3.ii) "The dormant bulbs have been sourced from a “Pest free place of production”, free from *Phymatotrichopsis omnivora*".

AND for consignments with a “Pest free place of production” declaration for *Phymatotrichopsis omnivoria*:

- 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

- 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 <u>other than</u> 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."

AND

2. "The bulbs have been sourced from a “Pest free area” or “Pest free place of production” [choose one], free from *Potato spindle tuber viroid*".

AND

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

OR

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

AND for consignments with a “Pest free place of production” declaration for *Phymatotrichopsis omnivoria*:

- 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

- 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 sourced from a “Pest free area” or “Pest free place of production” [choose one], free from *Potato spindle tuber viroid* AND tested and found free of virus diseases.”

OR

"The cultures have been derived from parent stock tested by PCR and found free from *Potato spindle tuber viroid* AND 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:

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

Quarantine Pests: *Ceratocystis fimbriata; Phellinus noxius*; *Xylella fastidiosa;* Uredinales

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Erythrina* genus

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the members of the *Convolvulus, Crepis, Erigeron, Geranium, Phyllanthus, Salvia* and *Senecio* genera
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Applies to the following species: *Barleria cristata* **and** applies to all members of the *Erythrina* genus

d. 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:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Note: Only applies to the members of the *Convolvulus, Crepis, Erigeron, Geranium, Phyllanthus, Salvia* and *Senecio* genera
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved 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.

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:

Approved 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°C ± 0.5°C for 2 days, then fumigated with methyl bromide at 14g/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.

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 *Diascia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Potato spindle tuber viroid*[1]

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

A. For Whole Plants and Cuttings:
PEQ: Level 2
Minimum Period: 3 months
Additional declaration:

"The nursery stock in this consignment has been sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Potato spindle tuber viroid*".

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 sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Potato spindle tuber viroid*".
OR
"The cultures have been derived from parent stock tested by PCR and found free from *Potato spindle tuber viroid*".

[1] Requirements for *Potato spindle tuber viroid* will commence on 1 September 2014:
All phytosanitary certificates issued on or after 1 September 2014 must be endorsed with the correct additional declarations for *Potato spindle tuber viroid*.

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:

Approved 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 <u>other than</u> 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 Culture:
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 *Diospyros*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

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

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

A. For Whole Plants
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

B. For Tissue Cultures:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

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:

Approved 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

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*."

Treatment for dormant cuttings:
Dormant cuttings must be treated for regulated insects and mites as described in section 2.2.1.6 (part B) of the Basic Conditions.

Treatment for non-dormant cuttings and whole plants (excluding *Dracaena deremensis*):
Non-dormant cuttings and whole plants must be treated for regulated insects and mites on arrival in New Zealand using methyl bromide fumigation as described in section 2.2.1.6 (part B) of the Basic Conditions. Methyl bromide may be damaging to some *Dracaena* species and is carried out at the importer's risk.

Treatment for non-dormant cuttings and whole plants of *Dracaena deremenisis* ONLY:
Prior to export the nursery stock must be treated for regulated insects and mites as described in section 2.2.1.6 (part B) of the Basic Conditions. On arrival in New Zealand, the importer has the option to treat the non-dormant cuttings or whole plants using the alternate chemical treatment listed below **OR** methyl bromide fumigation as described in section 2.2.1.6 (part B) of the Basic Conditions.

1. The foliage of imported plants shall be dipped in a combination of pesticides, from two different chemical groups, as specified below in Table 1. Dipping is to occur at room temperature, and the treatment time is 2-5 minutes.
2. 10-14 days after the initial dipping treatment, the consignment must be spray treated in PEQ with a combination of pesticides from two different chemical groups as specified in Table 1.

Table 1 Alternate treatment for Dracaena deremensis

Chemical group	**Active ingredient (a.i.)**	**Rate**
Organophosphorous	Acephate	0.8 g a.i. per litre of dip
	Dimethoate	1.1 g a.i. per litre of dip
Carbamate	Carbaryl	1.2 g a.i. per litre of dip
Spinosyns	Spinosad	2.0 g a.i. per litre of dip

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

Measures for *Pantoea ananatis*:
The following measures will apply to **all** *Dracaena* species on entry into New Zealand or while in post entry quarantine.

– If plants exhibit any symptoms that may be indicative of infection with *Pantoea ananatis*, samples will be collected and submitted for diagnostic testing.
– If any plants are identified as being infected with *Pantoea ananatis*, the whole consignment must be either reshipped or destroyed, at the expense of the importer.

B. For Plants in 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 *Eriobotrya*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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: *Ceratocystis fimbriata, Phellinus noxius; 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

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Eriobotrya japonica*

c. 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.

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:

Approved Countries: All

Quarantine Pests: *Ceratocystis fimbriata; Puccinia psidii* sensu lato (s.l.) complex (including *Uredo rangelii*)*; Chrysoporthe cubensis; Endothia havanensis; Mycosphaerella parva; Phellinus noxius; Phytophthora ramorum; Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
d. Conditions for *Phellinus noxious* (section 2.2.1.13)

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
Guidance for importers: Tissue cultures which are imported under Option 2 of the conditions for *Puccinia psidii* s.l. complex, AND require PEQ under section 2.2.2.5, must complete the PEQ requirements for *Puccinia psidii* before being deflasked into the PEQ greenhouse.

b. Conditions for *Puccinia psidii* s.l. complex:

OPTION 1:
i) Additional declaration:
– "*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in ___(the country of origin)__".
OR
– "The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (59-73.4°F)".
ii) The tissue cultures are subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

OPTION 2:
PEQ: Level 2 Tissue culture laboratory
Minimum Period: 4 weeks
i) The cultures containers are not to be opened during the quarantine period.

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:

Approved 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: *Phellinuis noxius; Puccinia psidii* sensu lato (s.l.) complex (including *Uredo rangelii*); *Xylella fastidiosa*

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

A. For Whole Plants:

OPTION 1:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Syzygium samarangense*

c. Additional declaration: "*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in __(the country of origin)__".

OPTION 2:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Syzygium samarangense*

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
Guidance for importers: Tissue cultures which are imported under Option 2 of the conditions for *Puccinia psidii* s.l. complex, AND require PEQ under section 2.2.2.5, must complete the PEQ requirements for *Puccinia psidii* before being deflasked into the PEQ greenhouse.

b. Conditions for *Puccinia psidii* s.l. complex:

OPTION 1:
i) Additional declaration:
– "*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in __(the country of origin)__".

OR

– "The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (59-73.4°F)".

OPTION 2:
PEQ: Level 2 Tissue culture laboratory
Minimum Period: 4 weeks
i) The cultures containers are not to be opened during the quarantine period.

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:

Approved 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

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. 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:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved 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 MPI-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.

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:

Approved 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: *Ceratocystis fimbriata; Cronartium quercuum*; *Phytopthora ramorum*; *Xylella fastidiosa;* Tortricidae

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

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

OPTION 1:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Fagus* genus

b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the members of the *Fagus* genus

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

OPTION 2:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Fagus* genus

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to members of the species *Fagus* genus

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Note: Only applies to the members of the *Fagus* genus
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

Fagus sylvatica

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 *Fagus sylvatica*", and are additional to those specified in sections 1,2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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: *Ceratocystis fimbriata; Cronartium quercuum; Cryphonectria parasitica; Phytophthora ramorum*; Tortricidae; *Xylella fastidiosa*

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

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Fagus* genus

b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

d. Additional declaration for *Cryphonectria parasitica*:
– "*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".

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

OPTION 2:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Fagus* genus

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. Subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

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:

Approved Countries: All

Quarantine Pests: *Ceratocystis fimbriata; Phellinus noxius; Uredo ficina; Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months
Note: Nursery stock of Ficus microcarpa must be free of flowers and fruit.

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
   Note: Only applies to the following species: *Ficus carica*

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Phellinus noxius* (section 2.2.1.13)

d. Additional declaration:
   - *"Uredo ficina* is not known to occur in __(the country or state where the plants were grown)__".

   OR
   - "The *Ficus* spp. has been sourced from a pest free place of production, free from *Uredo ficina*"

B. For Tissue Cultures:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
   Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Additional declaration:
   - *"Uredo ficina* is not known to occur in __(the country or state where the plants were grown)__".

   OR
   - "The *Ficus* spp. has been sourced from a pest free place of production, free from *Uredo ficina*"

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 MPI-accredited facilities (quarantine stations)

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Fortunella,* the accredited facility operator must also have an agreement with MPI 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 MPI 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 MPI 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 MPI (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 MPI-accredited facility

AND

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

(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 MPI, 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 MPI 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. Plants must be held at 18-25°C throughout the quarantine period.

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

Indicative minimum quarantine periods are:

- 6 months for *Fortunella* cuttings sourced from mother plants that have been kept in insect proof plant houses, which may be extended to 12 months to allow for testing to be completed; or
- 16 months for *Fortunella* cuttings sourced directly from open ground mother plants.

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 MPI 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 MPI (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 MPI, and to conform with the current phytosanitary requirements of MPI."

(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 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 MPI-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 3B MPI-accredited facility. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(v) *Post-entry quarantine*

PEQ: Level 3B

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 MPI-accredited facilities

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Fortunella*, the accredited facility operator must also have an agreement with MPI 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 MPI 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 MPI 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 MPI (refer to the pest list).

AND

- held and tested for/classified free from specified regulated pests at a MPI-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 MPI, 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 MPI 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 MPI 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 MPI (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 MPI, and to conform with the current phytosanitary requirements of MPI."

(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 3B MPI-accredited facility. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(vi) *Post-entry quarantine*

PEQ: Level 3B

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.	-

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

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

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

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

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

Eumeta japonica	-
Eumeta minuscula	tea bagworm
Eumeta moddermanni	-
Hyalarcta huebneri	leaf case moth
Pyralidae	
Apomyelois ceratoniae	date pyralid
Tortricidae	
Adoxophyes sp.	-
Amorbia cuneana	leafroller
Archips argyrospilus	fruit tree leafroller
Archips machlopis	leafroller
Archips occidentalis	leafroller
Archips rosanus	rose leafroller
Argyrotaenia citrana	orange tortrix
Cacoecimorpha pronubana	carnation leafroller
Cryptophlebia batrachopa	-
Cryptophlebia leucotreta	false codling moth
Homona magnanima	oriental tea tortrix
Isotenes miserana	orange fruitborer
Platynota stultana	omnivorous leafroller
Tortrix capensana	tortricid moth
Yponomeutidae	
Prays citri	citrus flower moth
Prays parilis	citrus flower moth
Neuroptera	
Chrysopidae	
Chrysopa oculata [Animals Biosecurity]	-
Coniopterygidae	
Coniopteryx vicina [Animals Biosecurity]	-
Conwentzia barretti [Animals Biosecurity]	-
Orthoptera	
Acrididae	
Zonocerus elegans	elegant grasshopper
Gryllidae	
Ornebius kanetataki	cricket
Tettigoniidae	
Caedicia sp.	-
Holochlora japonica	Japanese broadwinged katydid
Microcentrum retinerve	smaller angular-winged katydid
Scudderia furcata	fork-tailed bush katydid
Psocoptera	
Archipsocidae	
Archipsocus sp.	bark louse
Thysanoptera	
Aeolothripidae	
Franklinothrips vespiformis [Animals Biosecurity]	-
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Leptothrips mali	black hunter thrips
Scirtothrips aurantii	citrus thrips
Scirtothrips citri	citrus thrips
Scirtothrips dorsalis	chilli thrips
Scirtothrips mangiferae	mango thrips
Scolothrips sexmaculatus [Animals Biosecurity]	-
Taeniothrips kellyanus	-
Taeniothrips sp.	-
Thrips coloratus	thrips
Thrips flavus	flower thrips
Thrips palmi	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	Texus 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	
Achatina immaculata	-
Lissachatina immaculata	snail
Bradybaenidae	
Acusta despecta sieboldiana	snail
Subulinidae	
Rumina decollata	snail
Urocyclidae	
Urocyclus flavescens	-
Urocyclus kirkii	-
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe rudis (anamorph *Phomopsis rudis*)	phomopsis canker
Dothideales	
Elsinoaceae	
Elsinoe australis	sweet orange scab
Capnodiaceae	
Capnodium citri	sooty mould
Didymosphaeriaceae	
Didymosphaeria sp.	--
Mycosphaerellaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*) [black spot strain]	citrus black spot
Mycosphaerella citri (anamorph *Stenella citri-grisea*)	rind blotch
Mycosphaerella horii	greasy spot
Patellariales	
Patellariaceae	
Rhytidhysteron rufulum	--
Saccharomycetales	
Saccharomycetaceae	
Debaryomyces hansenii	-
Galactomyces citri-aurantii (anamorph *Geotrichum citri-aurantii*)	sour rot
Basidiomycota: Agaricomycetes	
Hymenochaetales	
Hymenochaetaceae	
Phellinus noxius	brown root rot
Basidiomycota: Basidiomycetes	
Boletales	
Coniophoraceae	
Coniophora eremophila	brown wood rot
Basidiomycota: Teliomycetes	
Septobasidiales	
Septobasidiaceae	
Septobasidium pseudopedicellatum	felt fungus
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
Sphaceloma fawcettii var. *scabiosa*	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Macrophoma mantegazziana	-
Phoma erratica var. *mikan*	--
Phoma tracheiphila	mal secco
Phomopsis sp.	rot

Septoria spp.	-
Sphaeropsis tumefaciens	stem gall
Unknown Coelomycetes	
Unknown Coelomycetes	
Aschersonia placenta [Animals Biosecurity]	--
Gloeosporium foliicolum	fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria limicola	-
Alternaria pellucida	--
Cercospora microsora	-
Phaeoramularia angolensis	cercospora spot
Stemphylium rosarium	--
Ulocladium obovoideum	ulocladium rot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Aureobasidium sp.	-
Hirsutella thompsonii [Animals Biosecurity]	--
Isaria sp. [Animals Biosecurity]	-
Oidium tingitaninum	powdery mildew
Sporobolomyces roseus	--
Stenella sp.	--
Zygomycota: Zygomycetes	
Glomales	
Glomaceae	
Glomus etunicatum [Animals Biosecurity]	--
Mucorales	
Syncephalastraceae	
Syncephalastrum racemosum	--
Bacterium	
Bacterium family unknown	
Liberobacter africanum	citrus greening bacterium
Liberobacter asiaticum	citrus greening bacterium
Liberobacter sp.	citrus greening bacterium
Spiroplasma citri	citrus stubborn
Pseudomonadaceae	
Burkholderia cepacia	sour skin
Xanthomonas axonopodis pv. *citri*	citrus canker
Xanthomonas campestris pv. *aurantifolii*	-
Xanthomonas campestris pv. *citrumelo*	citrus bacterial spot
Xylella fastidiosa	Pierce's disease
Xylella fastidiosa pv. *citri*	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 [Natsudaidai dwarf strain]	-
xyloporosis viroid	-
yellow vein clearing of lemon	-

Phytoplasma

Candidatus 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 impietratura disease	-
citrus sunken vein disease	-
concave gum	-
cristacortis	-
gum pocket	-
gummy bark	-
kassala disease	-
lemon sieve tube necrosis	-
shell bark of lemons	-
zonate chlorosis	-

Inspection, Testing and Treatment Requirements for *Fortunella**

ORGANISM TYPES	MPI 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	
Burkholderia cepacia	Growing season inspection for symptom expression.
Liberobacter africanum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
Liberobacter asiaticum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
Spiroplasma citri	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.
Xanthomonas axonopodis pv. *citri*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xanthomonas campestris pv. *aurantifolii*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xanthomonas campestris pv. *citrumelo*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xylella fastidiosa	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
Xylella fastidiosa pv. *citri*	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, *Citrus excelsa*, 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 *Citrus excelsa*. 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	MPI ACCEPTABLE METHODS
satsuma dwarf nepovirus [Natsudaidai 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 Citrus excelsa. 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 Citrus macrophylla.
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 Citrus excelsa. Grow indicators at cool temperatures 18 to 25°C.
cristacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa. Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa. 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	
Candidatus 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 defined in section 2.3.2.1.
2. With prior notification, MPI will accept other internationally recognised testing methods.

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 *Fragaria*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

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

Cuttings (runner tips and stem cuttings only); Plants in tissue culture

Fragaria can be imported into Level 2 post entry quarantine from MPI-accredited facilities, or into Level 3B post entry quarantine from non-accredited facilities.

2. Pests of *Fragaria*

Refer to the pest list.

3. Entry conditions for:

3.1 *Fragaria* cuttings and tissue culture from offshore MPI-accredited facilities in any country

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

(i) *Documentation*

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Fragaria* 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 MPI have been undertaken.

The *Fragaria* 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 MPI and the [name of the MPI-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 *Fragaria* 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 MPI and the [name of the MPI-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 *Fragaria* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).
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. 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 *Fragaria* 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 *Fragaria* 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 MPI have been undertaken.

The *Fragaria* 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 *Fragaria* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: 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 *Fragaria*

REGULATED PESTS (actionable)

Insect	
Insecta	
Coleoptera	
Attelabidae	
Rhynchites germanicus	strawberry rhynchites
Bruchidae	
Zabrotes arenarius	strawberry weevil
Cantharidae	
Chauliognathus lugubris	soldier beetle
Carabidae	
Calathus fuscipes	ground beetle
Harpalus affinis	strawberry seed beetle
Harpalus rufipes	strawberry seed beetle
Nebria brevicollis	common black ground beetle
Pterostichus cupreus	strawberry ground beetle
Pterostichus madidus	strawberry ground beetle
Pterostichus melanarius	strawberry ground beetle
Chrysomelidae	
Altica caerulescens	leaf beetle
Chaetocnema concinna	leaf feeding beetle
Colaspis flavida	grape colaspis
Galeruca tanaceti	strawberry leaf beetle
Galerucella grisescens	strawberry leaf beetle
Galerucella tenella	strawberry leaf beetle
Haltica corrusca	fles beetle
Haltica pagana	flea beetle
Paria fragariae	strawberry rootworm
Systena frontalis	flea beetle
Curculionidae	
Anthonomus rubi	strawberry blossom weevil
Anthonomus signatus	strawberry bud weevil
Apirocalus spp.	weevils
Barypeithes pellucidus	strawberry weevil
Cleonus kirbyi	radish weevil
Conotrachelus nenuphar	plum weevil
Donus salviae	strawberry weevil
Dyslobus decoratus	decorated strawberry root weevil
Dyslobus ursinus	western strawberry root weevil
Dyslobus wilcoxi	Lacomb strawberry root weevil
Geoderces spp.	root weevil
Haplidia etrusca	root weevil
Hypera brunneipennis	Egyptian alfalfa weevil
Myllocerus undecimpustulatus	grey weevil
Nemocestes fragariae	strawberry root weevil
Nemocestes incomptus	woods weevil
Nemocestes longulus	strawberry root weevil
Nemocestes sordidus	strawberry root weevil
Orthorhinus aethops	weevil
Otiorhynchus armatus	strawberry root weevil
Otiorhynchus clavipes	red-legged weevil
Otiorhynchus cribricollis	cribrate weevil
Otiorhynchus meridionalis	strawberry root weevil
Otiorhynchus rotundatus	strawberry root weevil
Otiorhynchus rugifrons	strawberry root weevil
Otiorhynchus singularis	strawberry root weevil

Panscopus torpidus	root weevil
Peritelopsis globiventris	grey weevil
Plinthodes taeniatus	root weevil
Polydrusus cervinus	weevil
Polydrusus sericeus	green leaf weevil
Rhadinosomus lacordairei	thin strawberry weevil
Rhinaria perdix	strawberry weevil
Rhynchites germanicus	strawberry rhynchites
Sciaphilus asperatus	strawberry root weevil
Sciopithes obscurus	obscure root weevil
Sitona hispidulus	root weevil
Strophomorphus porcellus	weevil
Thricolepis inornata	root weevil
Trigonoscuta pilosa	root weevil
Tyloderma fragariae	strawberry crown borer
Elateridae	
Agriotes spp. (species not in New Zealand)	click beetles
Nitidulidae	
Carpophilus fumatus	sap beetle
Glischrochilus hortensis	sap beetle
Lobiopa insularis	strawberry borer
Stelidota spp.	sap beetles
Stelidota geminata	strawberry sap beetle
Scarabaeidae	
Anoplognathus porosus	Christmas beetle
Cetonia spp.	chafers
Cyclocephala borealis	northern masked chafer
Hoplia spp.	white grubs
Lepidiota frenchi	French's cane grub
Melolontha melolontha	cockchafer
Metanastes vulgivagus	black beetle
Phyllopertha horticola	garden chafer
Phyllophaga decimlineata	ten-lined June beetle
Phyllophaga perversa	western ten-lined June beetle
Popillia japonica	Japanese beetle
Repsimus aeneus	white grub
Rhopaea magnicornis	large pasture scarab
Serica spp.	white grubs
Sericesthis geminata	priunose scarab
Sericesthis nigrolineata	dusky pasture scarab
Scolytidae	
Poecilips cardamomi	bark beetle
Silphidae	
Heterosilpha aenescens	carrion beetle
Collembola	
Sminthuridae	
Bourletiella arvalis dorsobscura	garden springtail
Sminthurus multidentatus	garden springtail
Diptera	
Agromyzidae	
Agromyza fragariae	strawberry leafminer
Agromyza spiraeae	rose leafminer
Tipulidae	
Tipula spp	leatherjackets
Hemiptera	
Anthocoridae	
Orius laevigatus	plant bug
Lygaeidae	
Euander lacertosus	lygaeid bug
Nysius clevelandensis	grey cluster bug

Nysius spp.	bugs
Nysius vinitor	Rutherglen bug
Miridae	
Calocoris hobartensis	capsid
Lygocoris pabulinus	common green capsid
Lygus elisus	pale legume bug
Lygus hesperus	tarnished plant bug
Lygus lineolaris	tarnished plant bug
Lygus rugulipennis	tarnished plant bug
Plagiognathus arbustorum	stink bug
Plagiognathus chrysanthemi	stink bug
Scolopostethus spp.	plant bugs
Pentatomidae	
Acrosternum hilare	green stink bug
Dolycoris baccarum	stink bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Aleyrodidae	
Aleyrodes lonicerae	strawberry whitefly
Trialeurodes fernaldi	whitefly
Trialeurodes packardi	strawberry whitefly
Trialeurodes ruborum	whitefly
Aphididae	
Acyrthosiphon malvae rogersii	strawberry aphid
Amphorophora agathonica	strawberry aphid
Aphis fabae	bean aphid
Aphis forbesi	strawberry root aphid
Aphis gossypii [vector]	cotton aphid
Aphis rubifolii	raspberry aphid
Aulacorthum solani [vector]	foxglove aphid
Chaetosiphon jacobi	strawberry aphid
Chaetosiphon minus	lesser strawberry aphid
Chaetosiphon tetrarhodum [vector]	strawberry aphid
Chaetosiphon thomasi	strawberry aphid
Fimbriaphis fimbriata	rose aphid
Fimbriaphis wakibae	rose aphid
Macrosiphum pelargonii	rose aphid
Macrosiphum rosae [vector]	rose aphid
Myzaphis rosarum [vector]	lesser rose aphid
Myzus ascalonicus [vector]	shallot aphid
Myzus ornatus [vector]	ornate aphid
Myzus persicae [vector]	green peach aphid
Rhodobium porosum	aphid
Aphrophoridae	
Aphrophora alni	spittlebug
Aphrophora permutata	rhubarb spittlebug
Cercopidae	
Cercopis vulnerata	red and black froghopper
Emelyanoviana mollicula	spittlebug
Evacanthus interruptus	spittlebug
Philaenus leucophthalmus	spittlebug
Cicadellidae	
Aphrodes bicinctus	strawberry leafhopper
Apogonalia grossa	leafhopper
Coelidia olitoria	leafhopper
Edwardsiana spp.	leafhoppers
Empoasca fabae	potato leafhopper
Erythroneura elegantula	western grape leafhopper
Euscelis spp.	leafhoppers

Macrosteles spp.	leafhoppers
Scaphytopius acutus	leafhopper
Zygina schneideri	leafhopper
Pseudococcidae	
Chorizococcus arecae	mealybug
Dysmicoccus brevipes	pineapple mealybug
Planococcus citri	citrus mealybug
Rhizoecus kondonis	Kondo mealybug
Hymenoptera	
Tenthredinidae	
Allantus calceatus	sawfly
Allantus cinctus	curled rose sawfly
Cladius pectinicornis	antler sawfly
Lepidoptera	
Gelechiidae	
Aristotelia fragariae	strawberry crown miner
Compsolechia fragariella	western strawberry leafroller
Geometridae	
Ascotis selenaria	mugwort looper
Hepialidae	
Hepialus lupulinus	swift moth
Noctuidae	
Agrotis spp. (species not in New Zealand)	cutworms
Agrotis munda	brown cutworm
Agrotis segetum	turnip moth
Amphipoea interoceanica	strawberry cutworm
Helicoverpa punctigera	oriental tobacco budworm
Helicoverpa zea	bollworm
Hydraecia interoceanica	noctuid moth
Noctua pronuba	large yellow underwing
Orthosia hibisci	speckled green fruitworm
Peridroma saucia	pearly underwing moth
Phlogophora meticulosa	angleshades moth
Spodoptera exigua	lesser armyworm
Spodoptera sunia	cluster caterpillar
Xestia c-nigrum	spotted cutworm
Psychidae	
Hyalarcta huebneri	leaf case moth
Pyralidae	
Loxostege spp.	pyralid moths
Udea rubigalis	celery leaftier
Sesiidae	
Synanthedon bibionipennis	strawberry crown moth
Tortricidae	
Acleris comariana	strawberry tortrix moth
Ancylis comptana	strawberry leafroller
Ancylis fragariae	strawberry leafroller
Argyrotaenia citrana	orange tortrix
Cacoecimorpha pronubana	carnation leafroller
Choristoneura lafauryana	strawberry leafroller
Choristoneura rosaceana	oblique-banded leafroller
Claremontia confusa	leafroller
Clepsis busckana	cyclamen leafroller
Clepsis spectrana	straw coloured tortrix
Cnephasia asseclana	leafroller
Cnephasia longana	omnivorous leaftier
Cnephasia stephensiana	leaftier
Compsolechia fragariella	western strawberry leafroller
Cryptoptila immersana	ivy leafroller
Epiphyas spp.	leafrollers

Lozotaenia forsterana	leafroller
Olethreutes lacunana	fruit tree tortrix
Olethreutes olivaceana	fruit tree tortrix
Pandemis dumetana	fruit tree tortrix
Platynota stultana	omnivorous leafroller
Ptycholoma peritana	garden tortrix
Sparganothis sulfureana	blueberry leafroller
Orthoptera	
Acrididae	
Phaulacridium vittatum	wingless grasshopper
Gryllotalpidae	
Gryllotalpa africana	African mole cricket
Gryllotalpa gryllotalpa	mole cricket
Scapteriscus acletus	southern mole cricket
Scapteriscus vicinus	tawny mole cricket
Pyrgomorphidae	
Atractomorpha crenaticeps	grasshopper
Thysanoptera	
Thripidae	
Scirtothrips dorsalis	chilli thrips
Scolothrips sexmaculatus	
Thrips atratus	carnation thrips
Thrips major	rose thrips
Mites	
Arachnida	
Acarina	
Diptilomiopidae	
Diptacus fragarifoliae	false spider mite
Tetranychidae	
Tetranychus kanzawai	kanzawaii mite
Tetranychus lobustus	strawberry spider mite
Tetranychus neocalendonicus	Mexican spider mite
Tetranychus pacificus	Pacific spider mite
Nematodes	
Adenophorea	
Dorylaimida	
Longidoridae	
Longidorus elongatus [vector]	-
Longidorus sylphus	needle nematode
Paralongidorus maximus	needle nematode
Xiphinema americanum [Vector]	dagger nematode
Xiphinema chambersi	dagger nematode
Xiphinema diversicaudatum [vector]	dagger nematode
Secernentea	
Tylenchida	
Aphelenchoididae	
Aphelenchoides besseyi	rice white-tip nematode
Belonolaimidae	
Belonolaimus gracilis	sting nematode
Criconematidae	
Criconemoides curvatum	ring nematode
Criconemoides lobatum	ring nematode
Dolichodoridae	
Tylenchorhynchus claytoni	tobacco stunt nematode
Heteroderidae	
Heterodera spp.	cyst nematode
Hoplolaimidae	
Hoplolaimus spp.	crown-headed lance nematode

Helicotylenchus microlobus	spiral nematode
Rotylenchulus buxophilus	reniform nematode
Rotylenchulus goodeyi	reniform nematode
Scutellonema brachyurus	spiral nematode
Paratylenchidae	
Paratylenchus macrophallus	pin nematode
Pratylenchidae	
Pratylenchus brachyurus	root lesion nematode
Pratylenchus coffeae	coffee root lesion nematode
Pratylenchus loosi	root lesion nematode
Pratylenchus scribneri	Scribner's root lesion nematode
Pratylenchus zeae	corn root lesion nematode
Radopholus similis	burrowing nematode
Myriapod	
Diplopoda	
Polydesmida	
Xystodesmidae	
Pleuroloma flavipes	millipede
Molluscs	
Gastropoda	
Stylommatophora	
Helicidae	
Trichia striolata	strawberry snail
Fungi	
Ascomycota	
Dothideales	
Mycosphaerellaceae	
Mycosphaerella louisianae	purple leaf spot
Eurotiales	
Trichocomaceae	
Byssochlamys fulva	byssochlamys rot
Hypocreales	
Hypocreaceae	
Schizoparme straminea (anamorph *Coniella castaneicola*)	schizoparme fruit rot
Leotiales	
Leotiaceae	
Discohainesia oenotherae (anamorph *Hainesia lythri*)	leaf spot
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
Armillaria bulbosa	armillaria root rot
Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)	armillaria root rot
Armillaria tabescens	armillaria root rot
Ceratobasidiales	
Ceratobasidiaceae	
Ceratobasidium anceps (anamorph *Sclerotium deciduum*)	leaf rot
Rhizoctonia fragariae	black root rot
Chytridiomycota	
Chytridiales	
Olpidiaceae	
Olpidium brassicae [vector]	Black root
Basidiomycota: Teliomycetes	
Uredinales	
Pucciniaceae	

Phragmidium mexicana	
Phragmidium potentiallae	leaf rust
Chytridiomycota	
Chytridiales	
Synchytriaceae	
Synchytrium fragariae	root gall
Mitosporic Fungi (Agonomycetes)	
Agonomycetales	
Unknown Agonomycetales	
Rhizoctonia fragariae	fruit and root rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Leptostromataceae	
Kabatia fragariae	leaf spot
Sphaerioidaceae	
Coniella fragariae	flower spot
Phyllosticta fragaricola	phyllosticta leaf spot
Rhabdospora fragariae	leaf spot
Septoria fragariae	septoria spot
Septoria fragariaecola	septoria spot
Stagonospora fragariae	stagonospora
Unknown Coelomycetes	
Unknown Coelomycetes	
Colletotrichum spp. (species not in New Zealand)	
Glomerella cingulata (anamorph Colletotrichum gloeosporioides)	strawberry anthracnose
Marssonina canadensis	leaf scorch
Marssonina pakistanica	leaf scorch
Marssonina potentillae	leaf scorch
Pestalotia longisetula	leaf spot
Pilidiella quercola	schizoparme fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Cercospora fragariae	leaf spot
Cercospora vexans	cercospora leaf spot
Idriella lunata	root rot
Moniliaceae	
Ramularia fragariae	ramularia leaf spot
Verticillium albo-atrum [severe strain]	progressive wilt
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *fragariae*	stub wilt
Oomycota	
Peronosporales	
Peronosporaceae	
Peronospora fragariae	downy mildew
Pythiales	
Pythiaceae	
Pythium debaryanum	root rot
Pythium dissotocum	root rot
Pythium hypogynum	root rot
Pythium perniciosum	root and stem rot
Pythium sylvaticum	root rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Mucor recurvus	mucor rot
Rhizopus spp.	

Bacteria

Erwinia pyrifoliae	
Ralstonia solanacearum (Race 2)	moko disease
Strawberry marginal chlorosis [*'Candidatus* phlomobacter fragariae']	
Strawberry rickettsia yellows	
Xanthomonas arboricola pv. fragariae	bacterial leaf blight
Xanthomonas fragariae	angular leaf spot
*Xylella fastidiosa**	Pierce's disease

Viruses

Fragaria chiloensis latent virus [strains not in New Zealand]	-
Raspberry ringspot virus	-
Strawberry chlorotic fleck virus	-
Strawberry latent C virus	-
Strawberry latent ringspot virus [strains not in New Zealand*]*	
Strawberry mild yellow edge-associated virus	-
Strawberry pallidosis associated virus	-
Strawberry pseudo mild yellow edge virus	-
Strawberry vein banding virus	-
Tobacco necrosis virus [strains not in New Zealand]	-
Tobacco streak virus [strains not in New Zealand]	
Tomato bushy stunt virus	-
Tomato ringspot virus	-

Phytoplasmas

Aster yellows phytoplasma	-
Clover phyllody phytoplasma	-
Clover proliferation phytoplasma	-
Clover yellow edge phytoplasma	-
Stolbur phytoplasma	-
STRAWB1 phytoplasma	-
STRAWB2 phytoplasma	
Strawberry green petal phytoplasma	-
Strawberry leafy fruit phytoplasma	
Strawberry multicipita phytoplasma	
Strawberry multiplier phytoplasma	-
Strawberry phylloid fruit phytoplasma	
Strawberry yellows phytoplasma	

Diseases of unknown aetiology

Strawberry feather leaf disease
Strawberry lethal decline disease

* For organisms intercepted that are not listed within this pest list refer to the http://mpi.govt.nz/news-and-resources/resources/registers-and-lists/biosecurity-organisms-register-for-imported-commodities to determine regulatory status.

Inspection, Testing and Treatment Requirements for *Fragaria*

ORGANISM TYPES	MPI-ACCEPTABLE METHODS
Insects	Visual inspection AND approved insecticide treatments as described in the basic conditions of the Import Health Standard Nursery Stock from All countries [cuttings only]
Mites	Visual inspection AND approved miticide treatments as described in the basic conditions of the Import Health Standard Nursery Stock from All countries. [cuttings only] or binocular microscope inspection in PEQ [plants *in vitro* only]
Nematodes	Growing season inspection in PEQ for symptoms of foliar nematodes
Fungi	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility. Growing season inspection in PEQ for symptom expression
Bacteria (and diseases caused by bacteria-like organisms)	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility.
Erwinia pyrifoliae	Growing season inspection for symptom expression and PCR
Ralstonia solanacearum (Race 2)	Growing season inspection for symptom expression.
Strawberry marginal chlorosis (*'Candidatus* phlomobacter fragariae')	Growing season inspection for symptom expression AND PCR
Strawberry rickettsia yellows	Growing season inspection for symptom expression
Xanthomonas arboricola pv. fragariae	Growing season inspection for symptom expression AND PCR
Xanthomonas fragariae	Growing season inspection for symptom expression AND PCR
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Viruses	
Fragaria chiloensis latent virus [strains not in New Zealand]	Herbaceous indicators (*Chenopodium quinoa* and *Cucumis sativus*)
Raspberry ringspot virus	Herbaceous indicator (*Chenopodium quinoa*) AND ELISA or PCR
Strawberry chlorotic fleck virus	Graft inoculation (*Fragaria vesca* cl. EMB or EMK)
Strawberry latent C virus	Graft inoculation (*Fragaria vesca* cl. EMC or UC5)
Strawberry latent ringspot virus [strains not in New Zealand]	Herbaceous indicators (*Chenopodium quinoa* and *Cucumis sativus*) AND ELISA or PCR
Strawberry mild yellow edge-associated virus	Graft inoculation (2 indicators; *Fragaria vesca* cl. UC4 or UC5, or cv. Alpine
Strawberry pallidosis associated virus	Graft inoculation (*Fragaria virginiana* cl. UC10 or UC11)
Strawberry pseudo mild yellow edge virus	Graft inoculation (*Fragaria vesca* cl.UC4 or cv. Alpine. or *Fragaria virginiana* cl. UC12)
Strawberry vein banding virus	Graft inoculation (*Fragaria vesca* cl.UC5 or UC6, or cv. Alpine. or *Fragaria virginiana* cl. UC12) AND PCR
Tobacco necrosis virus [strains not in New Zealand]	Herbaceous indicators (*Chenopodium quinoa and Cucumis sativus*) AND ELISA or PCR
Tobacco streak virus [strains not in New Zealand]	Herbaceous indicators (*Chenopodium quinoa* and *Cucumis sativus*)
Tomato bushy stunt virus	Herbaceous indicator (*Chenopodium quinoa)*
Tomato ringspot virus	Herbaceous indicators (*Chenopodium quinoa* and *Cucumis sativus)* AND ELISA or PCR
Phytoplasmas	Growing season inspection AND nested PCR or real time PCR
Diseases of unknown aetiology	
Strawberry feather leaf disease	Graft inoculation (*Fragaria vesca* cl. UC1 or UC4, or cv. Alpine)
Strawberry lethal decline disease	Graft inoculation (*Fragaria vesca* cv. Alpine)

Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. Plants *in vitro*: all tissue culture plantlets must go through a period of dormancy before virus testing to increase the virus titre. Plantlets must also be potted up and grown in a MPI approved greenhouse and only material from the greenhouse is to be selected for testing.
3. Virus testing is to be conducted on new spring growth.
4. Growing season is defined as an extended period of plant growth that includes environmental conditions equivalent to spring (longer wetter days and colder temperatures), summer (longer dryer days and warm temperatures), and autumn (shorter wetter days and warm but cooling temperatures).
5. Phytoplasma and bacteria testing is to be conducted at the end of the summer growth period. Plants must be sampled from at least two positions on the apical crown region.
6. Graft indexing hosts: Each Fragaria plant must be tested by leaf-grafting onto two replicate indicator cultivars. The indicator plants must be maintained in a vigorous state of growth before and after grafting. Grafted plants are to be inspected regularly for symptoms of disease for at least 3 months.
7. Herbaceous indicator hosts: *Chenopodium quinoa* and *Cucumis sativus*. Two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator plants must be grown at 18-25ºC before and after inoculation 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.
8. Enzyme linked immunosorbent assay (ELISA) tests. All ELISA tests must be validated using both positive and negative controls prior to use in quarantine testing. Positive, negative, and buffer controls must be used in all tests.
9. Polymerase chain reaction (PCR) tests. All PCR tests must be validated using positive controls prior to use in quarantine testing. Positive and no template controls must be used in all tests. Positive internal control primers and a negative plant control should also be used in PCR tests.
10. Inspection of the *Fragaria* plants by the operator of the PEQ facility for signs of pest and disease must be at least twice per week during periods of active growth.
11. Other internationally recognised testing methods may be accepted by MPI with prior notification.

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:

Approved 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 MPI-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 MPI-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 <u>other than</u> 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 *Fuchsia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Aculops fuchsiae* (Fuchsia Gall Mite); *Phytophthora ramorum*; *Xylella fastidiosa*

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

A. For Whole Plants or Cuttings:

PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Additional declaration:
- "*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:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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 *Gaultheria*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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, *Phytophthora ramorum*.

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months

a. **Additional Declarations:** "*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".

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

c. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

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 *Gentiana*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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.

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:

Approved 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:

Approved 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 MPI-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 bulb certification scheme."
OR
2) For bulbs NOT produced under a MPI-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 <u>other than</u> 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.

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 G*lycyrrhiza*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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.

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:

Approved 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 *Hebe*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Phellinus noxius; Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for Phellinus noxius (section 2.2.1.13)
Note: Only applies to members of the *Albizia* and *Cassia* genera AND the following species: *Agathis robusta, Celtis sinensis, Grevillea robusta, Hibiscus rosa-sinensis, Hibiscus schizopetalus, Hibiscus tiliaceus, Ilex rotunda, Lagerstroemia speciose, Lagerstroemia subcostata, Ligustrum japonicum, Liquidambar formosana* and *Pistacia chinensis*

B. For Cuttings:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

C. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved Countries: All

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

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):

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Phymatotrichopsis omnivora*

OPTION 1

i) Additional declaration: "The dormant bulbs have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

OPTION 2:

i) Additional declaration: "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.

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 for Primary Industries (MPI) 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

- 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 and phytoplasmas."

(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* 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 for Primary Industries (MPI) have been undertaken.

The *Hippeastrum* dormant bulbs have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme and inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pest.

AND

- The bulbs are free from *Armillaria mellea* and *Pratylenchus scribneri*.

AND

- Sourced from a pest free production site for *Hippeastrum* free from regulated nematodes and fungi 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 have been produced in accordance with the requirements of the BKD Class 1 bulb certification scheme and inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pest.

AND

- The bulbs are free from *Armillaria mellea* and *Pratylenchus scribneri*.

AND

- Sourced from a pest free production site for hippeastrum free from regulated nematodes and fungi and held in a manner to ensure that infestation/reinfestation does not occur following certification."

(iv) *Post-entry quarantine*
Post-entry quarantine is not required provided that the above measures have been completed.

3.3 *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 for Primary Industries (MPI) 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.

(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

(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 3B
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	
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)	armillaria root rot

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:

Approved Countries: All

Quarantine Pests: *Pseudoperonospora humuli*; *Tetranychus kanzawai*; *Verticillium albo-atrum; Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

B. For Plants in Tissue Culture:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

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:

Approved Countries: All

Quarantine Pests: *Tetranychus kanzawai*; *Phellinus noxius; Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Hydrangea chinensis* and *Morus alba*

c. 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 Cuttings:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Additional declaration: "The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre of water".

C. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved Countries: All

Quarantine pests: *Helicobasidium mompa*; *Streptomyces ipomoea*; virus diseases; *Xylella fastidiosa*.

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

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

B. For Tissue Cultures:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

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 for Primary Industries (MPI) 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 MPI Inspector.

3.2 *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 for Primary Industries (MPI) 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 for Primary Industries (MPI) 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 *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 *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 3B

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	
Hemicycliophora 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*	armillaria root rot

subcorticalis)	
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	-
Japanese iris necrotic ring virus	-
Tobacco rattle virus [strains not in New Zealand]	-

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:

Approved 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: *Ceratocystis fimbriata; 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:

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Juglans* genus

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

B. For Tissue Culture:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
Note: Only applies to members of the *Juglans* genus

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:

Approved Countries: All

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

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

For Whole Plants:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the members of the *Juniperus* genus

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:

Approved 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 (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:

Approved 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 for Primary Industries (MPI) 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 MPI 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 for Primary Industries (MPI) have been undertaken.

The *Lilium* 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

- 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 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 *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 for Primary Industries (MPI) 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 3B
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 lilivora	-
Mite	
Arachnida	
Acarina	
Acaridae	
Schwiebea cuncta	-
Schwiebea taiwanensis	-
Tenuipalpidae	
Brevipalpus lilium	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 lilii*)	Rust
Uromyces aecidiiformis	rust fungi
Uromyces holwayi	-
mitosporic fungi (Agonomycetes)	

Agonomycetales	
unknown Agonomycetales	
Rhizoctonia tuliparum	basal rot
Sclerotium rolfsii var. *delphinii*	sclerotium rot
Sclerotium wakkeri	Blackleg
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Macrophoma lilii	black root rot
Phyllosticta liliicola	black rot
unknown Coelomycetes	
unknown Coelomycetes	
Colletotrichum lilii	-
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
Botrytis hyacinthi	hyacinth blight
Ramularia vallisumbrosae	white mould
Tuberculariales	
Tuberculariaceae	
Fusarium oxysporum f. sp. *lilii*	basal rot
unknown Hyphomycetes	
unknown Hyphomycetes	
Aureobasidium microstictum	-
Bacterium	
Enterobacteriaceae	
Erwinia lilii	-
Virus	
Apple stem grooving virus [strains not in New Zealand]	-
Lily rosette virus	-
Tobacco rattle virus [strains not in New Zealand]	-
Tomato ringspot 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 *Lithocarpus densiflorus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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, *Phytophthora ramorum*

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

a. Additional declaration: "*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".
b. Additional declaration: "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water".
c. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

OPTION 2:
PEQ: Level 3B
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 MPI-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 *Litchi*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: Australia

Quarantine Pests: *Aceria litchii*; *Phellinus noxius;* Xyloryctidae (Lepidoptera)

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Phellinus noxius* (section 2.2.1.13)

b. 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

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:

Approved 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

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 *Malus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

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

Cuttings (dormant); plants in tissue culture

Malus can be imported into Level 2 post entry quarantine from MPI-accredited facilities, or into Level 3B post entry quarantine from non-accredited facilities.

2. Pests of *Malus*

Refer to the pest list.

3. Entry conditions for:

3.1 *Malus* cuttings and tissue culture from offshore MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Malus*, the accredited facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Malus*. Refer to the "Inspection, Testing and Treatment Requirements for *Malus*".

(i) *Documentation*

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Malus* 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 MPI have been undertaken.

The *Malus* 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 MPI and the [name of the MPI-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 *Malus* 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 MPI and the [name of the MPI-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 *Malus* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 6 months (active continuous growth) in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. For tissue cultures, the quarantine period begins when tissue cultures are deflasked into the PEQ greenhouse. 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 *Malus* 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 *Malus* 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 MPI have been undertaken.

The *Malus* 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 *Malus* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 36 months in post-entry quarantine. For tissue cultures, the quarantine period begins when tissue cultures are deflasked into the PEQ greenhouse. During this time, imported material will be inspected, treated and/or tested for regulated pests as specified in the "Inspection, Testing and Treatment Requirements for *Malus*", 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 *Malus*

For organisms intercepted that are not listed within this pest list refer to the Biosecurity Organisms Register for Imported Commodities to determine regulatory status.

REGULATED PESTS (actionable)

Insect	
Insecta	
Coleoptera	
Attelabidae	
Rhynchites caeruleus	apple twig cutter
Bostrichidae	
Amphicerus bicaudatus	apple twig borer
Apate monachus	black borer
Buprestidae	
Agrilus mali	apple wood borer
Agrilus spp.	bark borers
Chrysobothris femorata	flatheaded apple tree borer
Chrysobothris mali	Pacific flatheaded borer
Chrysobothris spp.	flat-headed borers
Sphenoptera lafertei	flatheaded peach tree borer
Cerambycidae	
Aeolesthes sarta	Quetta borer
Apriona germarii	mulberry longicorn beetle
Apriona japonica	mulberry borer
Bacchisa fortunei	pear borer
Batocera rufomaculata	red-spotted longhorn beetle
Phryneta spinator	
Curculionidae	
Anthonomus piri	apple bud weevil
Eremnus atratus	black weevil
Eremnus cerealis	western province grain worm
Eremnus setulosus	grey weevil
Scolytidae	
Hypothenemus obscurus	apple twig borer
Scolytus japonicus	Japanese bark beetle
Scolytus rugulosus	fruit bark borer
Diptera	
Cecidomyiidae	
Resseliella oculiperda	red bud borer
Thomasiniana oculiperda	red bud borer
Hormptera	
Aphididae	
Aphis spiraecola	spiraea aphid
Diaspididae	
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	Spanish red scale
Diaspidiotus africanus	grey scale
Lepidoptera	
Cossidae	
Coryphodema tristis	quince trunk borer
Gelechiidae	
Recurvaria syrictis	bud moth
Gracillariidae	
Marmara elotella	apple barkminer
Marmara pomonella	apple fruitminer
Oecophoridae	
Cryptophasa melanostigma	fruit tree borer
Pyralidae	

Euzophera semifuneralis	American plum borer
Ostrinia nubilalis	European corn borer
Sesiidae	
Thamnosphecia pyri	apple bark borer
Synanthedon scitula	pecan tree borer
Mite	
Arachnid	
a	
Acarina	
Eriophyidae	
Aculops malus	eriophyid mite
Eriophyes mali	Willamette spider mite
Phyllocoptes mali	eriophyid mite
Cenopalpus chitraliensis	bryobia mite
Cenopalpus haqii	banana mite
Cenopalpus orakiensis	Bailey's apple rust mite
Cenopalpus pulcher	flat scarlet mite
Tenuipalpidae	
Brevipalpus lilium	false spider mite
Brevipalpus obovatus	privet mite
Tenuipalpus taonicus	Pacific mite
Rhinotergum schestovici	mite
Tetranychidae	
Eotetranychus carpini	false spider mite
Eotetranychus uncatus	Lewis spider mite
Eotetranychus willamettei	hazel mite
Oligonychus gossypii	tetranychid mite
Oligonychus newcomeri	spider mite
Oligonychus yothersi	avocado red mite
Tetranychus canadensis	four spotted spider mite
Tetranychus kanzawai	Kanzawa spider mite
Tetranychus mcdanieli	McDaniel spider mite
Tetranychus schoenei	Schoenei spider mite
Amphitetranychus viennensis	hawthorn spider mite
Tydeidae	
Tydeus spp.	tydeid mites
Fungus	
Ascomycota: Ascomycetes	
Diaporthales	
Valsaceae	
Diaporthe tanakae (anamorph Phomopsis tanakae)	pear canker
Leucostoma auerswaldii	leucostoma canker
Diatrypales	
Diatrypaceae	
Eutypella sorbi	stem disease
Dothideales	
Mycosphaerellaceae	
Mycosphaerella pyri (anamorph Septoria pyricola)	leaf fleck of pear
Mycosphaerella tulasnei	rot
Schizothyriaceae	
Schizothyrium perexiguum	greasy blotch
Erysiphales	
Erysiphaceae	
Pleochaeta mali	powdery mildew
Heotiales	
Dermateaceae	
Diplocarpon mali	black spot
Pezicula perennans	perennial canker
Sclerotiniaceae	
Grovesinia pyramidalis (anamorph Cristulariella moricola)	target spot
Monilinia laxa f. sp. *mali*	brown rot
Monilinia mali	monilinia leaf blight

Monilinia fructigena (anamorph Monilia fructigena)	European brown rot
Sclerotinia spp.	neck rot
Rhytismatales	
Cryptomycetaceae	
Potebniamyces pyri (anamorph *Phacidiopycnis piri*)	Phacidiopycnis rot
Sordariales	
Chaetomiaceae	
Chaetomium spp.	fruit rot
Taphrinales	
Taphrinaceae	
Taphrina bullata	leaf blister
Xylariales	
Xylariaceae	
Biscogniauxia marginata	nailhead canker
Daldinia vernicosa	wood rot
Xylaria mali	black root rot
Ascomycota: Saccharomycetes	
Saccharomycetales	
Endomycetaceae	
Endomycopsis mali	rot
Basidiomycota: Basidiomycetes	
Agaricales	
Coprinaceae	
Coprinus psychromorbidus	coprinus rot
Tricholomataceae	
Armillaria mellea	armillaria root rot
Armillaria ostoyae	armillaria root rot
Armillaria tabescens	armillaria root rot
Ceratobasidiales	
Ceratobasidiaceae	
Ceratobasidium stevensii	thread blight
Ganodermatales	
Ganodermataceae	
Ganoderma lucidum	wood rot
Hymenochaetales	
Hymenochaetaceae	
Phellinus pomaceus	white heart rot
Lachnocladiales	
Lachnocladiaceae	
Scytinostroma galactinum	white root rot
Polyporales	
Corticiaceae	
Corticium koleroga	thread blight
Cyphellaceae	
Maireina marginata	wood decay
Meripilaceae	
Phlebia radiata	wood decay
Trametes ochracea	wood decay
Poriales	
Coriolaceae	
Ceriporia spissa	wood rot
Coriolopsis gallica	white rot
Fomes fomentarius	wood decay
Fomitopsis pinicola	brown cubical rot
Laetiporus sulphureus (anamorph *Sporotrichum versisporum*)	brown cubical rot
Lenzites betulina	wood decay
Oxyporus latemarginatus	wood decay
Oxyporus similis	wood decay
Stereales	
Atheliaceae	
Butlerelfia eustacei	storage rot

Sistotremataceae	
Phymatotrichopsis omnivorum	Texas root rot
Basidiomycota: Urediniomycetes	
Uredinales	
Pucciniaceae	
Gymnosporangium clavipes	quince rust
Gymnosporangium cornutum	rust
Gymnosporangium fuscum	European pear rust
Gymnosporangium globosum	American hawthorn rust
Gymnosporangium hemisphaericum	rust
Gymnosporangium libocedri	Pacific Coast pear rust
Gymnosporangium nelsonii	Rocky Mountain pear rust
Gymnosporangium nidus-avis	rust
Gymnosporangium nootkatense	yellow cypress rust
Gymnosporangium shiraianum	rust
Gymnosporangium spp.	cedar apple rust
Gymnosporangium tremelloides	common juniper gall rust
Gymnosporangium yamadae	Japanese apple rust
Gymnosporangium juniperi-virginianae	cedar apple rust
Unknown Uredinales	
Roestelia fenzeliana	rust
Roestelia levis	rust
Basidiomycota: Ustomycetes	
Platygloeales	
Platygloeaceae	
Helicobasidium mompa	violet root rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Cytospora schulzeri	bark disease
Dothiorella mali	fruit rot
Phomopsis truncicola	blight
Phyllosticta solitaria	apple blotch
Phyllosticta spp.	leaf spot
Pyrenochaeta mali	fruit rot
Sphaeropsis pyriputrescens	Sphaeropsis rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria mali	alternaria blotch
Alternaria spp.	
Helminthosporium papulosum	black pox
Cladosporium spp.	mouldy core
Epicoccum spp.	mouldy core
Stemphylium spp.	
Ulocladium spp.	cladosporium rot
Moniliaceae	
Aspergillus spp.	coloured moulds
Botrytis mali	fruit rot
Cephalosporium carpogenum	fruit rot
Cephalosporium spp.	
Penicillium spp.	rot
Ramularia macrospora	bellflower leaf spot
Verticillium spp.	verticillium wilt
Tuberculariales	
Tuberculariaceae	
Fusarium spp.	
Unknown Hyphomycetes	
-	
Oidium spp.	powdery mildew
Bacterium	
Schizomycetes	

	Pseudomonadales	
	Pseudomonadaceae	
	Pseudomonas syringae pv. *papulans*	blister spot
Virus		
	Cherry rasp leaf virus	
+	*Tomato bushy stunt virus*	
	Tomato ringspot virus	
Viroid		
	Apple dimple fruit viroid	
	Apple fruit crinkle viroid	
	Apple scar skin viroid	
Phytoplasma		
	'*Candidatus* Phytoplasma asteris'	Apple sessile leaf phytoplasma
	'*Candidatus* Phytoplasma mali'	Apple proliferation phytoplasma
Disease of unknown etiology		
	Apple blister bark agent	
	Apple brown ringspot agent	
	Apple bumpy fruit agent	
	Apple bunchy top agent	
	Apple dead spur agent	
	Apple decline	
	Apple freckle scurf agent	
	Apple green dimple and ring blotch agent	
	Apple junction necrotic pitting agent	
	Apple McIntosh depression agent	
	Apple narrow leaf agent	
	Apple Newton wrinkle agent	
	Apple pustule canker agent	
	Apple red ring agent	
	Apple rosette agent	
	Apple rough skin agent	
	Apple russet wart agent	
	Apple star crack agent	
	Apple transmissible internal bark necrosis agent	

Inspection, Testing and Treatment Requirements for *Malus*

ORGANISM TYPES	MPI-ACCEPTABLE METHODS
Insects	Visual inspection **AND** approved insecticide treatments as described in section 2.2.1.6 of the Basic conditions [cuttings only]
Mites	Visual inspection **AND** approved miticide treatments as described in the section 2.2.1.6 of the Basic conditions [cuttings only] **or** binocular microscope inspection in PEQ [plants in tissue culture only]
Fungi	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility. Growing season inspection in PEQ for symptom expression
Bacteria	
Pseudomonas syringae pv. *papulans*	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility. Growing season inspection for symptom expression **AND** PCR
Viruses	
Cherry rasp leaf virus	Woody indexing ('Golden delicious') **or** herbaceous indexing (*Chenopodium quinoa* and *Chenopodium amaranticolor*) **AND** PCR
Tomato bushy stunt virus	Herbaceous indexing (*Chenopodium quinoa* and *Chenopodium amaranticolor*)
Tomato ringspot virus	Herbaceous indexing (*Chenopodium quinoa* and *Chenopodium amaranticolor*) **AND** ELISA **or** PCR
Viroids	
Apple dimple fruit viroid	Woody indexing ('Red delicious') **AND** PCR
Apple fruit crinkle viroid	Woody indexing ('Golden delicious') **AND** PCR
Apple scar skin viroid	Woody indexing ('Golden delicious' and 'Red delicious') **AND** PCR
Phytoplasmas	
'*Candidatus* Phytoplasma asteris' (Apple sessile leaf phytoplasma)	Nested PCR or real time PCR using universal phytoplasma primers
'*Candidatus* Phytoplasma mali' (Apple proliferation phytoplasma)	Woody indexing ('Golden delicious') **AND** nested PCR or real time PCR using universal phytoplasma primers
Diseases of unknown etiology	
Apple blister bark agent	Growing season inspection
Apple brown ringspot agent	Growing season inspection
Apple bumpy fruit agent	Growing season inspection
Apple bunchy top agent	Growing season inspection
Apple dead spur agent	Woody indexing ('Golden delicious' and 'Red delicious')
Apple decline	Growing season inspection
Apple freckle scurf agent	Growing season inspection
Apple green dimple and ring blotch agent	Growing season inspection
Apple junction necrotic pitting agent	Growing season inspection
Apple McIntosh depression agent	Growing season inspection
Apple narrow leaf agent	Growing season inspection
Apple Newton wrinkle agent	Growing season inspection
Apple pustule canker agent	Growing season inspection
Apple red ring agent	Growing season inspection
Apple rosette agent	Growing season inspection
Apple rough skin agent	Woody indexing ('Golden delicious')
Apple russet wart agent	Woody indexing ('Golden delicious')
Apple star crack agent	Woody indexing ('Golden delicious' and 'Red delicious')
Apple transmissible internal bark necrosis agent	Growing season inspection

Notes:

1. **Pest free area or Pest free place of production** endorsements for regulated viruses, viroids, phytoplasmas, and diseases of unknown etiology must be assessed by MPI prior to permit issue. The exporting NPPO must endorse additional declarations on the phytosanitary certificate, to be considered equivalent to testing in post entry quarantine.
2. The **unit for testing** is definied in section 2.3.2.1.
3. **Tissue culture plantlets** must be deflasked and grown in a post entry quarantine greenhouse, only material from the greenhouse is to be selected for testing.
4. **Growing season** is defined as an extended period of plant growth that includes environmental conditions equivalent to spring (longer wetter days and colder temperatures), summer (longer dryer days and warm temperatures), and autumn (shorter wetter days and warm but cooling temperatures).
5. **Virus testing** is to be conducted on new spring growth.
6. **Phytoplasma and bacteria testing** is to be conducted at the end of the summer growth period.
7. **Woody indexing** relies on the development of fruit and bark symptoms on susceptible *Malus* cultivars which would only be expressed under field conditions (ie. Level 1 post entry quarantine [PEQ]). Negative and positive control plants must be included; the positive control must develop the expected symptoms (eg. Apple green crinkle [non-regulated]). Indicator plants must be observed for at least two fruit crops whilst the plants are in Level 1 PEQ. All nursery stock plants must remain in Level 3B post entry quarantine for the completion of woody indicator testing.
   Option 1: Woody indexing may be initiated in Level 1 PEQ after all the herbaceous indexing, molecular, and serological tests have been completed.
   Option 2: Woody indexing may be initiated in Level 3B PEQ when the nursery stock arrives in New Zealand and transferred to Level 1 PEQ as soon as the herbaceous indexing, molecular, and serological tests have been completed. In this case, woody indicator plants must be held under appropriate environmental conditions (day time temperatures of 22-25 °C and night time temperatures of 12-18 °C) in a separate unit within the facility that does not contain any other plant material.
8. **Testing protocols** for tests completed in New Zealand are described in the Malus (Apple) Post-Entry Quarantine Testing Manual, which can be viewed on the website:

   http://www.mpi.govt.nz/protection-and-response/laboratories/plant-health-and-environment-laboratory/publications/
9. **Inspection** of the *Malus* plants by the operator of the PEQ facility for signs of pest and disease must be at least twice per week for the first three months of active growth, and during spring and autumn. All other times of active growth (summer), plants should be inspected once per week. A record of inspections carried out by the Operator is to be kept and made available to the MPI Inspector on request.
10. **Other internationally recognised testing methods** may be accepted by MPI with prior notification.

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:

Approved Countries: Australia, India, Pakistan, Mexico, Philippines

Quarantine Pests: *Ceratocystis fimbriata, Phellinus noxius; Xanthomonas campestris* pv. *mangiferae-indicae*

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Mangifera indica*

c. 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".

B. For Tissue Cultures:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

b. 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".

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 *Metrosideros*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Ceratocystis fimbriata; Phellinus noxius; Puccinia psidii* sensu lato (s.l.) complex (including *Uredo rangelii*); *Xylella fastidiosa*

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

A. For Whole Plants:

OPTION 1:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Metrosideros* and *Pimenta* genera

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to members of the *Metrosideros* and *Myrtus* genera

c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Melaleuca leucadendra*

d. Additional declaration: "*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in (the country of origin)".

OPTION 2:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Metrosideros* and *Pimenta* genera

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to memebers of the *Metrosideros* and *Myrtus* genus

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Note: Only applies to memebers of the *Metrosideros* and *Myrtus* genus

b. Conditions for *Puccinia psidii* s.l. complex:

OPTION 1:
i) Additional declaration:
– "*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in __(the country of origin)__".

OR
– "The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (59-73.4°F)".

OPTION 2:

PEQ: Level 2 Tissue culture laboratory

Minimum Period: 4 weeks

i) The cultures containers are not to be opened during the quarantine period.
Guidance for importers: Tissue cultures imported this option must complete the PEQ requirements for *Puccinia psidii* before being deflasked into the PEQ greenhouse.

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 Miscanthus x giganteus", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. **Approved Countries:** United Kingdom and United States of America

2. **Type of material permitted entry:** Plants *in-vitro*

3. **Pests of *Miscanthus* x *giganteus***
   Refer to the enclosed pest list.

4. **Entry conditions:**

(i) *Documentation*

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

Import permit: an import permit is required.

(ii) Phytosanitary requirements

The full botanical name of *Miscanthus* x *giganteus* must be identified upon the phytosanitary certificate.

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

The *Miscanthus x giganteus* plants in tissue culture have been:

- derived from mother plants which were not expressing symptoms of infection by regulated pests prior to the excision of the in-vitro plantlets.

AND

- derived from explant material which has been surfaced sterilised in a solution of 0.5% sodium hypochorite and sterile water, or MPI approved alternative treatment.

AND

- propagated in culture media which is clear.

AND

- prepared by asexual reproduction (clonal techniques) under sterile conditions.

AND

- 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*

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. The following additional declarations must be identified on the phytosanitary certificate.

The *Miscanthus* x *giganteus* plants in-vitro in this consignment have been:

- derived from mother plants sourced from a "Pest free area"," Pest free place of production" or "Pest free production site", free from *Leifsonia xyli* subsp. *xyli*, Miscanthus streak virus, and Sugarcane mosaic virus

AND

- derived from mother plants sourced from a "Pest free area"," Pest free place of production" or "Pest free production site", free from *Ustilago scitaminea* **OR** derived from explants that have been subjected to two consecutive hot water treatments at a minimum temperature of 50˚C for 3 hours per treatment **OR** two consecutive hot water treatments at a minimum temperature of 52˚C for 1 hour per treatment

(iv) *Inspection, Testing and Treatment of the consignment*

Where an additional declaration cannot be attested to on the phytosanitary certificate by the NPPO, testing of material shall be completed in post-entry quarantine upon arrival in New Zealand as specified within the testing and treatment requirements in this schedule.

For organisms intercepted that are not listed within this pest list refer to the Biosecurity Organisms Register for Imported Commodities to determine regulatory status.

(v) *Post-entry quarantine*

PEQ: Level 2

Quarantine Period: A minimum post entry quarantine period of 60 days of active continuous growth, within environmental conditions comprising a minimum average daily temperature of 20°C, and 8 hour light period shall be required to complete inspections and/or testing for pests as specified within the enclosed Regulated Pest List.

The quarantine period may be extended if material is slow growing, environmental requirements are not met, pests are detected, or additional treatments/tests are required. Sub-culturing is not to be undertaken during the PEQ period without prior approval from MPI. The costs of all inspections, tests and treatments while the *Miscanthus* x *giganteus* plant material is in PEQ shall be borne by the importer.

Regulated Pest List for Miscanthus:

Bacteria	
Acidovorax avenae ssp. *avenae*	Bacterial leaf blight
Leifsonia xyli subsp. *Xyli*	Sugarcane ratoon stunting disease
Fungi	
Acremonium sp.	Black bundle disease
Colletotrichum sp.	Leaf spot
Diaporthe sp.	Canker
Diplodia sp.	Blight
Drechslera gigantean	Eyespot
Fusarium miscanthi	Rot
Fusarium pallidoroseum	Rot
Glomerella sp.	Leaf spot
Glomerella tucumanensis	Leaf spot
Helminthosporium sp.	Eyespot
Leptosphaeria sp.	Canker
Magnaporthe salvinii	Stem rot
Mycosphaerella recutita	Leaf blight
Mycosphaerella striatiformans	Leaf spot
Nigrospora sp.	Stalk rot
Passalora koepkei	Yellow spot
Peronosclerospora sp.	Downy mildew
Phlyctema sp.	Canker
Phoma sp.	Blight
Phomopsis sp.	Blight
Phyllachora sp.	Leaf spot
Puccinia melanocephala	Sugarcane rust
Ramularia sp.	Anthracnose
Rhizoctonia sp.	Root rot
Stagonospora sp.	Scorch
Thanatephorus cucumeris	Blight
Ustilago scitaminea	Sugarcane smut
Verticillium sp.	Verticillium wilt
Mites	
Schizotetranychus celarius	Bamboo mite
Viruses	
Miscanthus streak virus	
Sugarcane mosaic virus	

Treatment and Testing Requirements during post entry quarantine:

Note: Treatment and testing requirements identified within this table are required to be undertaken when official assurances specified in this schedule cannot be provided by the exporting country's NPPO.

ORGANISM TYPE	MPI ACCEPTABLE MEASURES
Fungi	
Ustilago scitaminea	PCR/BIO-PCR, **OR** two consecutive hot water treatments at a minimum temperature of 50˚C for 3 hours per treatment **OR** two consecutive hot water treatments at a minimum temperature of 52˚C for 1 hour per treatment.
Bacteria	
Leifsonia xyli subsp. *xyli*	PCR/BIO-PCR, **OR** fluorescent-antibody staining of sap extracts, concentrated on membrane filters by filtration with observation by epifluorescence microscopy.
Viruses	
Miscanthus streak virus	PCR
Sugarcane mosaic virus	PCR or ELISA

Notes:

1. **Unit for testing:** The unit for testing is defined in section 2.3.2.1.
2. **Sample size for testing:** Sample size required for testing will be determined by MPI based on the specific test to be undertaken.
3. **Enzyme linked immunosorbent assay (ELISA) tests:** All ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive, negative, and buffer controls must be used in all tests unless indicated otherwise by MPI.
4. **Polymerase chain reaction (PCR) tests:** All PCR tests must be validated using positive controls prior to use in quarantine testing. Positive and no template controls must be used in all tests. Internal control primers and a negative plant control shall be used in PCR tests unless indicated otherwise by MPI.
5. **Inspection:** The operator of the PEQ facility must inspect the plants for signs of pest and disease at least twice per week during periods of active growth.
6. **Other internationally recognised testing methods:** May be accepted by MPI with prior notification.

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:

Approved 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 3B
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 MPI-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".

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:

Approved Countries: All

Quarantine Pests: *Alternanthera mosaic virus; Phellinus noxius; Plantago asiatica mosaic virus* (synonym *Nandina mosaic virus*); *Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

c. Additional declaration: "*Alternanthera mosaic virus* and *Plantago asiatica mosaic virus* are not known to occur in _____ (the country or state where the plants were grown) _____".

B. For Tissue Cultures:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Additional declaration: "The cultures have been derived from parent stock tested and found free of *Alternanthera mosaic virus* and *Plantago asiatica 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 *Nacissus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Frankliniella occidentalis*; *Hepialus lupulinus*; *Lilioceris lilii*; *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 MPI-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 bulb certification scheme."
OR
2) For bulbs NOT produced under a MPI-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 <u>other than</u> 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.

c. **Type of *Olea* nursery stock approved for entry into New Zealand**

Cuttings (dormant); Plants in tissue culture

d. **Pests of *Olea***

Refer to the pest list.

e. **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 MPI 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 3B greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

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
    - *Metaceronema 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
    - *Selenaspidus 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**
    - *Brevipalpus chalkidicus* — false spider mite
    - *Brevipalpus macedonicus* — false spider mite
    - *Brevipalpus oleae* — false spider mite

Brevipalpus olearius	false spider mite
Brevipalpus olivicola	false spider mite
Raoiella macfarlanei	false spider mite
Tenuipalpus caudatus	false spider mite
Tetranychidae	
Eotetranychus lewisi	big beaked plum mite
Fungus	
Ascomycota	
Dothideales	
Capnodiaceae	
Capnodium elaeophilum	sooty mould
Elsinoaceae	
Elsinoe oleae	olive scab
Unknown Dothideales	
Massariella oleae	bark canker
Massariella zambettakiana	canker
Zukalia purpurea	black mildew
Xylariales	
Xylariaceae	
Xylaria sicula	root rot
Basidiomycota	
Agaricales	
Agaricaceae	
Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)	armillaria root rot
Boletales	
Paxillaceae	
Omphalotus olearius	wood rot
Ganodermatales	
Ganodermataceae	
Ganoderma lucidum (anamorph *Polyporus lucidus*)	wood rot
Hymenochaetales	
Hymenochaetaceae	
Phellinus igniarius	wood rot
Oomycota	
Pythiaceae	
Pythaceae	
Phytophthora ramorum	Sudden oak death disease
Poriales	
Coriolaceae	
Fomes fomentarius	
Fomes fulvus	
Fomes salicinus	
Fomes torulosus	wood rot
Fomes yucatonensis	wood rot
Polyporaceae	
Polyporus biennis	wood rot
Polyporus oleae	wood rot
Stereales	
Sistotremataceae	
Trechispora brinkmanii (anamorph *Phymatotrichopsis omnivorum*)	Texas root rot
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Camarosporium dalmatica	brown spot
Cytospora oleina	canker
Macrophoma dalmatica	fruit rot
Phoma incompta	stem blight
Phyllosticta oleae	phyllosticta leaf spot
Septoria obesa	leaf spot
Septoria oleae	leaf spot

Septoria oleagina	leaf spot
Septoria serpentaria	leaf spot
Sphaeropsis dalmatica	stem gall
Sphaeropsis oleae	stem gall
Unknown Coelomycetes	
Unknown Coelomycetes	
Cylindrosporium olivae	leaf spot

Bacterium	
Pseudomonadaceae	
Pseudomonas syringae pv. *garcae*	twig blight
Xylella fastidiosa	

Virus	
Cherry leaf roll virus [strains not in New Zealand]	-
Olive latent 1 virus	-
Olive latent 2 virus	-
Olive latent ringspot virus	-
Olive leaf yellowing-associated virus	-
Olive vein yellow virus	-
Strawberry latent ringspot virus [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	-

Inspection, Testing and Treatment Requirements for *Olea*

ORGANISM TYPES	**MPI-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	
Pseudomonas syringae pv. *garcae*	Growing season inspection in PEQ for disease symptom expression.
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Virus	
Cherry leaf roll virus [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators Ca, Cq and Nb.
Olive latent 1 virus	Herbaceous indicators Ca, Cq and Nb.
Olive latent 2 virus	Herbaceous indicators Ca, Cq and Nb.
Olive latent ringspot virus	Herbaceous indicators Ca and Cq.
Olive leaf yellowing-associated virus	Woody indicators (*Olea europaea* cv. Biancolilla)
Olive vein yellow virus	Herbaceous indicators Cq
Strawberry latent ringspot virus [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators Ca and Cq.
Phytoplasmas	Woody indicators AND nested PCR or real time PCR using universal phytoplasma primers.
Diseases of unknown aetiology	Growing season inspection in PEQ for disease symptom expression.

Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. 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.
3. 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); Polymerase chain reaction (PCR).
5. 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.
6. PCR and ELISA must be validated using positive controls/reference material prior to use in quarantine testing.
7. Positive and negative controls must be used in ELISA tests.
8. 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.
9. 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.
10. With prior notification, MPI will accept other internationally recognised testing methods.

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:

Approved 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 flaccidium*; *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 flaccidium*".

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.

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:

Approved 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 flaccidium* 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;

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 sonniferum*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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

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:

Approved 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 MPI 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 3B greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

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
Pseudotheraptus 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
Protopulvinaria 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
Pinnaspis 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
Trioza perseae	psyllid
Hymenoptera	
Formicidae	

Atta cephalotes	leaf-cutting ant
Lepidoptera	
Geometridae	
Ascotis selenaria	mugwort looper
Sabulodes aegrotata	omnivorous looper
Hesperiidae	
Pyrrhopyge chalybea	swift moth
Noctuidae	
Peridroma margaritosa	-
Prodenia eridania	-
Pseudoplusia includens	soybean looper
Oecophoridae	
Stenoma catenifer	stenomid moth
Pyralidae	
Cryptoblabes gnidiella	Christmas berry webworm
Stericta albifasciata	-
Tortricidae	
Amorbia cuneana	leafroller
Amorbia emigratella	Mexican leafroller
Amorbia essigana	leafroller
Argyrotaenia citrana	orange tortrix
Cacoecimorpha pronubana	carnation leafroller
Cryptophlebia leucotreta	false codling moth
Homona spargotis	avocado leafroller
Isotenes miserana	orange fruitborer
Platynota stultana	omnivorous leafroller
Thysanoptera	
Thripidae	
Retithrips syriacus	black vine thrips
Selenothrips rubrocinctus	red-banded thrips
Mite	
Arachnida	
Acarina	
Tetranychidae	
Oligonychus coffeae	tea red spider mite
Oligonychus perseae	spider mite
Oligonychus punicae	avocado brown mite
Oligonychus yothersi	avocado red mite
Fungus	
Ascomycota	
Phyllachorales	
Phyllachoraceae	
Glomerella cingulata var. *minor* (anamorph *Colletotrichum gloeosporioides* var. *minus*)	anthracnose
Xylariales	
Xylariaceae	
Rosellinia bunodes	-
Rosellinia pepo	-
Basidiomycota	
Hymenochaetales	
Hymenochaetaceae	
Phellinus noxius	brown root rot
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora palmivora	black rot
Dothideomycetes	
Myriangiales	
Elsinoeaceae	
Sphaceloma perseae	Avocado scab

mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Phomopsis perseae	fruit rot
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Pseudocercospora purpurea	cercospora spot blotch
unknown Hyphomycetes	
unknown Hyphomycetes	
Stilbella cinnabarina	-
Bacteria	
Pseudomonadaceae	
Xylella fastidiosa	Pierce's disease
Virus	
Avocado cryptic virus 3	-
Viroid	
Avocado sunblotch viroid [strains not in New Zealand]	-
Potato spindle tuber viroid	-
Disease of unknown aetiology	
Avocado black streak	-

Inspection, Testing and Treatment Requirements for *Persea*

ORGANISM TYPES	**MPI-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.
Bacteria	
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Virus	
Avocado cryptic virus 3	Pest free area or Pest free place of production AND Growing season inspection in PEQ for disease symptom expression.
Viroid	
Avocado sunblotch viroid [strains not in New Zealand]	Hybridisation or PAGE or PCR (two sets).
Potato spindle tuber viroid	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 defined in section 2.3.2.1.
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, MPI will accept other internationally recognised testing methods.

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 *Phalaenopsis*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Capsicum chlorosis virus, Basella rugose mosaic virus*

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

A. For Whole Plants
PEQ: Level 2
Minimum Period: 3 months

B. For Whole Plants in growing media from Taiwan
No import permit is required.
PEQ: None
Specific Requirements: Sections 2.2.1.6 and 2.2.1.9 of the Basic Conditions are not required.
Additional Declarations:
"The *Phalaenopsis* spp. whole plants in MPI-approved growing media in this consignment:

1. have been sourced from mother stock that has been tested for, and found free from *Capsicum chlorosis virus* and *Basella rugose mosaic virus*,
   AND
2. comply with the requirements of the Offshore Assurance Programme (OAP) implemented by New Zealand MPI and Taiwan BAPHIQ,
   AND
3. have been inspected and found free from regulated viruses, insects, mites, fungi and bacteria,
   AND
4. have been treated with appropriate broad-spectrum insecticide and miticide drench no more than 14 days prior to export to New Zealand."

C. For 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 *Philodendron*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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 *Phoenix*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: Australia, Hawaii, mainland USA

Quarantine Pests: Lethal yellowing; cadang-cadang; Fusarium wilt; *Xylella fastidiosa*

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

A. For Whole Plants and Cuttings
PEQ: Level 2
Minimum Period: 3 months
Height Limit: Plants must not exceed 1.5m in height

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. 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) ___."

B. For Plants in Tissue Culture:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: The minimum quarantine period will be 6 months for tissue cultures sourced from countries not recognised by MPI as free from *Xylella fastidiosa*.

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

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:

Approved Countries: All

Quarantine Pests: *Gymnosporangium* spp., *Phytophthora ramorum; Xylella fastidiosa*

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

A. For Whole Plants:

PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Gymnosporangium* spp.:

i) Additional declaration:
- "*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".

AND

ii) Additional declaration: "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:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved Countries: All

Quarantine Pests: Elm mosaic virus; Elm phloem necrosis; *Phellinus noxius*

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

A. For Whole Plants
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Zelkova serrata*

B. For Tissue Cultures
PEQ: Level 3B
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 *Platanus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Ceratocystis platani; Xylella fastidiosa*

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

A: For Cuttings and Whole Plants

PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Ceratocystis platani*:

OPTION 1

i) Additional declaration: "The plants have been sourced from a country free from *Ceratocystis platani"*

OPTION 2, **For countries where *Ceretocystis platani* is known to be present**

i) Additional declaration: "The plants have been sourced from a state/province free from *Ceratocystis platani* or from a Pest Free Place of Production free from *Ceratocystis platani*"
AND
ii) The plants must be tested for *Ceratocystis platani* during the post entry quarantine period, at an MPI approved diagnostic facility.

Note: Countries where *Ceratocystis platani* is known to be present: Armenia, France, Greece, Italy, Switzerland, United States.

B. For Plants in Tissue Culture:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved 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 *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 MPI-accredited facilities (quarantine stations)

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Poncirus*, the accredited facility operator must also have an agreement with MPI 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 MPI 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 MPI 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 MPI (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 MPI-accredited facility
  AND
- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facilty.

(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 MPI, 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 MPI 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. Plants must be held at 18-25°C throughout the quarantine period.

Quarantine Period:

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

Indicative minimum quarantine periods are:

- 6 months for *Poncirus* cuttings sourced from mother plants that have been kept in insect proof plant houses, which may be extended to 12 months to allow for testing to be completed; or
- 16 months for *Poncirus* cuttings sourced directly from open ground mother plants.

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 MPI 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 MPI (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 MPI, and to conform with

the current phytosanitary requirements of MPI."

(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 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 MPI-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 3B MPI-accredited facility. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(v) *Post-entry quarantine*
PEQ: Level 3B
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 MPI-accredited facilities

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Poncirus*, the accredited facility operator must also have an agreement with MPI 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 MPI 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 MPI 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 MPI (refer to the pest list).

AND
- held and tested for/classified free from specified regulated pests at a MPI-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 MPI, 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 MPI 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 MPI 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 MPI (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 MPI, and to conform with the current phytosanitary requirements of MPI."

(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 3B MPI-accredited facility. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(vi) *Post-entry quarantine*

PEQ: Level 3B

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.	-
Protostrophus avidus	weevil
Sciobius marshalli	citrus snout beetle

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

Bemisia citricola	-
Dialeurodes citri	citrus whitefly
Dialeurodes citrifolii	cloudywinged whitefly
Dialeurolonga sp.	-
Parabemisia myricae	Japanese bayberry whitefly
Siphoninus phillyreae	phillyrea whitefly
Aphididae	
Aphis fabae	bean aphid
Aulacorthum magnoliae	Japanese elder aphid
Cicadellidae	
Asymmetrasca decedens	leafhopper
Circulifer opacipennis	-
Circulifer tenellus	beet leafhopper
Cuerna costalis	leafhopper
Edwardsiana flavescens	leafhopper
Empoasca bodenheimeri	-
Empoasca citrusa	green citrus leafhopper
Empoasca decipiens	green leafhopper
Empoasca distinguenda	-
Empoasca fabae	potato leafhopper
Empoasca onukii	tea green leafhopper
Homalodisca coagulata	glassy-winged sharpshooter
Homalodisca lacerta	-
Jacobiasca lybica	cotton jassid
Neoaliturus haematoceps	leafhopper
Penthimiola bella	citrus leafhopper
Scaphytopius nitridus	leafhopper
Cicadidae	
Cryptotympana facialis	black cicada
Meimuna opalifera	elongate cicada
Coccidae	
Ceroplastes floridensis	Florida wax scale
Ceroplastes japonicus	pink wax scale
Ceroplastes rubens	red wax scale
Ceroplastes rusci	fig wax scale
Coccus celatus	-
Coccus pseudomagnoliarum	citricola scale
Coccus viridis	green scale
Cribrolecanium andersoni	white powdery scale
Gascardia brevicauda	white waxy scale
Protopulvinaria pyriformis	pyriform scale
Pulvinaria aethiopica	soft green scale
Pulvinaria aurantii	citrus cottony scale
Pulvinaria cellulosa	pulvinaria scale
Saissetia citricola	citrus string cottony scale
Saissetia somereni	-
Dactylopiidae	
Dactylopius filamentosis	-
Dactylopius vastator	-
Diaspididae	
Aonidiella citrina	yellow scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus bifasciculatus	brown scale
Chrysomphalus dictyospermi	dictyospermum scale
Chrysomphalus pinnulifera	false purple scale
Ischnaspis longirostris	black thread scale
Lepidosaphes beckii	purple scale
Lepidosaphes gloverii	Glover scale
Parlatoria ziziphi	black parlatoria scale
Pseudaonidia duplex	camphor scale
Selenaspidus articulatus	West Indian red scale
Unaspis citri	citrus snow scale

Unaspis yanonensis	Japanese citrus scale
Flatidae	
Colgar peracuta	-
Geisha distinctissima	green broad-winged planthopper
Lawana conspersa	green flatid planthopper
Metcalfa pruinosa	planthopper
Fulgoridae	
Anzora unicolor	-
Margarodidae	
Drosicha howardi	persimmon mealybug
Icerya seychellarum	Seychelles scale
Ortheziidae	
Nipponorthezia ardisiae	ensign scale
Pseudococcidae	
Allococcus spp.	-
Ferrisia consobrina	mealybug
Ferrisia virgata	striped mealybug
Nipaecoccus vastator	nipa mealybug
Nipaecoccus viridis	hibiscus mealybug
Paracoccus burnerae	spherical mealybug
Planococcus kraunhiae	Japanese wisteria mealybug
Planococcus lilacinus	citrus mealybug
Planococcus minor	passionvine mealybug
Pseudococcus citriculus	smaller citrus mealybug
Pseudococcus commonus	-
Pseudococcus filamentosus	mealybug
Rastrococcus spinosus	mealybug
Rhizoecus kondonis	Kondo mealybug
Psyllidae	
Diaphorina citri	citrus psyllid
Trioza erytreae [vector]	citrus psyllid
Ricaniidae	
Scolypopa sp.	-
Tropiduchidae	
Tambinia sp.	-
Hymenoptera	
Aphelinidae	
Aphytis africanus [Animals Biosecurity]	-
Aphytis holoxanthus [Animals Biosecurity]	-
Aphytis lepidosaphes [Animals Biosecurity]	-
Aphytis lingnanensis [Animals Biosecurity]	-
Aphytis melinus [Animals Biosecurity]	-
Azotus platensis [Animals Biosecurity]	-
Cales noacki [Animals Biosecurity]	-
Cales orchamoplati [Animals Biosecurity]	-
Centrodora penthimiae [Animals Biosecurity]	-
Coccophagus caridei [Animals Biosecurity]	-
Coccophagus pulvinariae [Animals Biosecurity]	-
Encarsia ectophaga [Animals Biosecurity]	-
Encarsia lahorensis [Animals Biosecurity]	-
Encarsia lounsburyi [Animals Biosecurity]	-
Encarsia opulenta [Animals Biosecurity]	-
Encarsia smithi [Animals Biosecurity]	-
Eretmocerus serius [Animals Biosecurity]	-
Marietta connecta [Animals Biosecurity]	-
Marietta leopardina [Animals Biosecurity]	-
Braconidae	
Apanteles aristotalilae [Animals Biosecurity]	-
Biosteres longicaudatus [Animals Biosecurity]	-
Pholetesor ornigis [Animals Biosecurity]	-
Encyrtidae	
Anicetus beneficus [Animals Biosecurity]	-

Comperiella bifasciata [Animals Biosecurity]	-
Habrolepis rouxi [Animals Biosecurity]	-
Leptomastix dactylopii [Animals Biosecurity]	parasitic wasp
Metaphycus helvolus [Animals Biosecurity]	-
Metaphycus luteolus [Animals Biosecurity]	-
Metaphycus stanleyi [Animals Biosecurity]	-
Metaphycus varius [Animals Biosecurity]	-
Psyllaephagus pulvinatus [Animals Biosecurity]	-
Eulophidae	
Aprostocetus ceroplastae [Animals Biosecurity]	-
Elachertus fenestratus [Animals Biosecurity]	-
Tamarixia radiatus [Animals Biosecurity]	-
Eupelmidae	
Anastatus biproruli [Animals Biosecurity]	-
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	
Acromyrmex octospinosus	leaf-cutting ant
Anoplolepis braunsi [Animals Biosecurity]	-
Anoplolepis custodiens	ant
Anoplolepis steingroeveri [Animals Biosecurity]	black ant
Atta cephalotes	leaf-cutting ant
Atta sexdens	-
Atta texana	Texas leaf-cutting ant
Camponotus rufoglaucus	-
Crematogaster castanea	-
Crematogaster liengmei	-
Crematogaster peringueyi [Animals Biosecurity]	cocktail ant
Lepisiota capensis [Animals Biosecurity]	-
Myrmicaria natalensis	-
Pheidole tenuinodis	ant
Polyrhachis schistaceus	ant
Solenopsis invicta [Animals Biosecurity]	red imported fire ant
Tapinoma arnoldi	-
Technomyrmex albipes foreli [Animals Biosecurity]	-
Mymaridae	
Chaetomymar gracile [Animals Biosecurity]	-
Chaetomymar lepidum [Animals Biosecurity]	-
Gonatocerus incomptus [Animals Biosecurity]	-
Platygasteridae	
Amitus hesperidum [Animals Biosecurity]	-
Amitus spiniferus [Animals Biosecurity]	-
Fidiobia citri [Animals Biosecurity]	-
Scelionidae	
Trissolcus oeneus [Animals Biosecurity]	-
Trissolcus oenone [Animals Biosecurity]	-
Trissolcus ogyges [Animals Biosecurity]	-
Signiphoridae	
Signiphora fax [Animals Biosecurity]	-
Signiphora flavella [Animals Biosecurity]	-
Signiphora perpauca [Animals Biosecurity]	-
Trichogrammatidae	
Trichogramma platneri [Animals Biosecurity]	-
Vespidae	
Polistes spp. [Animals Biosecurity]	paper wasps
Isoptera	
Termitidae	
Odontotermes lokanandi	termite
Lepidoptera	
Arctiidae	
Lemyra imparilis	mulberry tiger moth
Blastobasidae	

Holcocera iceryaeella	-
Cosmopterigidae	
Pyroderces rileyi	pink scavenger caterpillar
Geometridae	
Anacamptodes fragilaria	koa haole looper
Ascotis selenaria reciprocaria	citrus looper
Gymnoscelis rufifasciata	geometrid moth
Hyposidra talaca	-
Gracillariidae	
Phyllocnistis citrella	citrus leafminer
Hepialidae	
Endoclita excrescens	Japanese swift moth
Endoclita sinensis	-
Lycaenidae	
Virachola isocrates	pomegranate butterfly
Lymantriidae	
Orgyia vetusta	western tussock moth
Metarbelidae	
Indarbela tetraonis	stem borer
Noctuidae	
Arcte coerula	fruit-piercing moth
Eudocima fullonia	fruit-piercing moth
Helicoverpa assulta	cape gooseberry budworm
Helicoverpa punctigera	oriental tobacco budworm
Tiracola plagiata	banana fruit caterpillar
Xylomyges curialis	noctuid moth
Nymphalidae	
Charaxes jasius	nymphalid butterfly
Oecophoridae	
Psorosticha melanocrepida	citrus leafroller
Psorosticha zizyphi	citrus leafroller
Stathmopoda auriferella	apple heliodinid
Papilionidae	
Papilio aegeus aegeus	-
Papilio anactus	small citrus butterfly
Papilio cresphontes	orange dog
Papilio dardanus cenea	-
Papilio demodocus	orange dog
Papilio demoleus demoleus	-
Papilio helenus nicconicolens	-
Papilio machaon asiatica	-
Papilio memnon	citrus swallowtail
Papilio memnon thunbergii	-
Papilio nireus lyaeus	-
Papilio polytes polytes	-
Papilio protenor demetrius	-
Papilio xuthus	citrus swallowtail
Papilio zelicaon	anise swallowtail
Psychidae	
Eumeta hardenbergi	-
Eumeta japonica	-
Eumeta minuscula	tea bagworm
Eumeta moddermanni	-
Hyalarcta huebneri	leaf case moth
Pyralidae	
Apomyelois ceratoniae	date pyralid
Tortricidae	
Adoxophyes sp.	-
Amorbia cuneana	leafroller
Archips argyrospilus	fruit tree leafroller
Archips machlopis	leafroller
Archips occidentalis	leafroller

Archips rosanus	rose leafroller
Argyrotaenia citrana	orange tortrix
Cacoecimorpha pronubana	carnation leafroller
Cryptophlebia batrachopa	-
Cryptophlebia leucotreta	false codling moth
Homona magnanima	oriental tea tortrix
Isotenes miserana	orange fruitborer
Platynota stultana	omnivorous leafroller
Tortrix capensana	tortricid moth
Yponomeutidae	
Prays citri	citrus flower moth
Prays parilis	citrus flower moth
Neuroptera	
Chrysopidae	
Chrysopa oculata [Animals Biosecurity]	-
Coniopterygidae	
Coniopteryx vicina [Animals Biosecurity]	-
Conwentzia barretti [Animals Biosecurity]	-
Orthoptera	
Acrididae	
Zonocerus elegans	elegant grasshopper
Gryllidae	
Ornebius kanetataki	cricket
Tettigoniidae	
Caedicia sp.	-
Holochlora japonica	Japanese broadwinged katydid
Microcentrum retinerve	smaller angular-winged katydid
Scudderia furcata	fork-tailed bush katydid
Psocoptera	
Archipsocidae	
Archipsocus sp.	bark louse
Thysanoptera	
Aeolothripidae	
Franklinothrips vespiformis [Animals Biosecurity]	-
Thripidae	
Chaetanaphothrips orchidii	banana rust thrips
Leptothrips mali	black hunter thrips
Scirtothrips aurantii	citrus thrips
Scirtothrips citri	citrus thrips
Scirtothrips dorsalis	chilli thrips
Scirtothrips mangiferae	mango thrips
Scolothrips sexmaculatus [Animals Biosecurity]	-
Taeniothrips kellyanus	-
Taeniothrips sp.	-
Thrips coloratus	thrips
Thrips flavus	flower thrips
Thrips palmi	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	Texus 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	
Achatina immaculata	-
Lissachatina immaculata	snail
Bradybaenidae	
Acusta despecta sieboldiana	snail
Subulinidae	
Rumina decollata	snail
Urocyclidae	
Urocyclus flavescens	-
Urocyclus kirkii	-

Fungus	
Ascomycota	
Diaporthales	
Valsaceae	

Diaporthe rudis (anamorph *Phomopsis rudis*)	phomopsis canker
Dothideales	
Elsinoaceae	
Elsinoe australis	sweet orange scab
Capnodiaceae	
Capnodium citri	sooty mould
Didymosphaeriaceae	
Didymosphaeria sp.	--
Mycosphaerellaceae	
Guignardia citricarpa (anamorph *Phyllosticta citricarpa*) [black spot strain]	citrus black spot
Mycosphaerella citri (anamorph *Stenella citri-grisea*)	rind blotch
Mycosphaerella horii	greasy spot
Patellariales	
Patellariaceae	
Rhytidhysteron rufulum	--
Saccharomycetales	
Saccharomycetaceae	
Debaryomyces hansenii	-
Galactomyces citri-aurantii (anamorph *Geotrichum citri-aurantii*)	sour rot
Basidiomycota: Agaricomycetes	
Hymenochaetales	
Hymenochaetaceae	
Phellinus noxius	brown root rot
Basidiomycota: Basidiomycetes	
Boletales	
Coniophoraceae	
Coniophora eremophila	brown wood rot
Basidiomycota: Teliomycetes	
Septobasidiales	
Septobasidiaceae	
Septobasidium pseudopedicellatum	felt fungus
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
Sphaceloma fawcettii var. *scabiosa*	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Macrophoma mantegazziana	-
Phoma erratica var. *mikan*	--
Phoma tracheiphila	mal secco
Phomopsis sp.	rot
Septoria spp.	-
Sphaeropsis tumefaciens	stem gall
Unknown Coelomycetes	
Unknown Coelomycetes	
Aschersonia placenta [Animals Biosecurity]	--
Gloeosporium foliicolum	fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria limicola	-
Alternaria pellucida	--
Cercospora microsora	-
Phaeoramularia angolensis	cercospora spot
Stemphylium rosarium	--
Ulocladium obovoideum	ulocladium rot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Aureobasidium sp.	-

Hirsutella thompsonii [Animals Biosecurity]	--
Isaria sp. [Animals Biosecurity]	-
Oidium tingitaninum	powdery mildew
Sporobolomyces roseus	--
Stenella sp.	--
Zygomycota: Zygomycetes	
Glomales	
Glomaceae	
Glomus etunicatum [Animals Biosecurity]	--
Mucorales	
Syncephalastraceae	
Syncephalastrum racemosum	--
Bacterium	
Bacterium family unknown	
Liberobacter africanum	citrus greening bacterium
Liberobacter asiaticum	citrus greening bacterium
Liberobacter sp.	citrus greening bacterium
Spiroplasma citri	citrus stubborn
Pseudomonadaceae	
Burkholderia cepacia	sour skin
Xanthomonas axonopodis pv. *citri*	citrus canker
Xanthomonas campestris pv. *aurantifolii*	-
Xanthomonas campestris pv. *citrumelo*	citrus bacterial spot
Xylella fastidiosa	Pierce's disease
Xylella fastidiosa pv. *citri*	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 [Natsudaidai dwarf strain]	-
xyloporosis viroid	-
yellow vein clearing of lemon	-
Phytoplasma	
Candidatus 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 impietratura disease	-
citrus sunken vein disease	-
concave gum	-
cristacortis	-
gum pocket	-
gummy bark	-
kassala disease	-
lemon sieve tube necrosis	-
shell bark of lemons	-
zonate chlorosis	-

Inspection, Testing and Treatment Requirements for *Poncirus**

ORGANISM TYPES	MPI 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	
Burkholderia cepacia	Growing season inspection for symptom expression.
Liberobacter africanum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
Liberobacter asiaticum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
Spiroplasma citri	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.
Xanthomonas axonopodis pv. *citri*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xanthomonas campestris pv. *aurantifolii*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xanthomonas campestris pv. *citrumelo*	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
Xylella fastidiosa	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
Xylella fastidiosa pv. *citri*	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, *Citrus excelsa*, 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 *Citrus excelsa*. 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	MPI ACCEPTABLE METHODS
satsuma dwarf nepovirus [Natsudaidai 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 *Citrus excelsa*. 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 *Citrus macrophylla.*
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 *Citrus excelsa*. Grow indicators at cool temperatures 18 to 25°C.
cristacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or *Citrus excelsa*. Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or *Citrus excelsa*. 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	
Candidatus 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 defined in section 2.3.2.1.
2. With prior notification, MPI will accept other internationally recognised testing methods.

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:

Approved 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 fimbriata; Marssonina* spp.; *Phellinus noxius; Phytophthora ramorum;* Uredinales; virus diseases; *Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

c. Conditions for Xylella fastidiosa (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

d. Conditions for *Phellinus noxius* (section 2.2.1.13)

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. Subject to examination at a MPI-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 *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 MPI-accredited facilities, or into Level 3B 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 MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. The operator of the accredited facility must also have an agreement with MPI 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 MPI 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 MPI and the [name of the MPI-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 MPI and the [name of the MPI-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 greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements:

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.

Alternatively:
Following 6 months of continuous active growth in level 2 post-entry quarantine, provided all required testing has been completed, no regulated organisms have been detected and based on a direction from the Inspector, the plants can be moved to a L1 post-entry quarantine facility for an additional 6 months of active growth. Upon completion of the 6 months in L2 and 6 months in L1, the plants can be given biosecurity clearance.

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 MPI 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 3B greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: 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	
Creontiades dilutus	green mirid
Lygus cerasi	-
Lygus elisus	pale legume bug
Lygus lineolaris	tarnished plant bug
Pentatomidae	
Acrosternum hilare	green stink bug
Antestiopsis orbitalis	-
Euschistus servus	brown stink bug
Tessaratoma papillosa	litchee stink bug
Homoptera	
Aleyrodidae	
Parabemisia myricae	Japanese bayberry whitefly
Aphididae	
Aphis spiraecola [vector]	spirea aphid
Brachycaudus amygdalinus	short tailed almond aphid
Brachycaudus cardui	thistle aphid
Brachycaudus schwartzi	aphid
Brachycaudus tragopogonis	-
Dysaphis plantaginea	rosy apple aphid
Hyalopterus amygdali	peach aphid
Hyalopterus pruni	mealy plum aphid
Hysteroneura setariae	rusty plum aphid
Myzus varians	peach-potato aphid
Pterochloroides persicae	giant brown bark aphid
Asterolecaniidae	
Asterolecanium pustulans	oleander pit scale
Cicadellidae	
Edwardsiana rosae	rose leafhopper
Coccidae	
Ceroplastes floridensis	Florida wax scale
Ceroplastes japonicus	pink wax scale
Ceroplastes rubens	red wax scale
Eulecanium pruinosum	frosted scale
Parthenolecanium persicae	European peach scale
Pulvinaria innumerabilis	cottony maple scale
Sphaerolecanium prunastri	globose scale
Diaspididae	
Aonidiella citrina	yellow scale
Aonidiella orientalis	oriental yellow scale
Aspidiotus destructor	coconut scale
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dictyospermi	dictyospermum scale
Diaspidiotus africanus	grey scale
Diaspidiotus ancylus	Putnam scale
Epidiaspis leperii	Italian pear scale
Parlatoria oleae	olive scale
Pseudaulacaspis pentagona	white peach scale
Flatidae	
Metcalfa pruinosa	planthopper
Margarodidae	
Icerya seychellarum	Seychelles scale
Membracidae	

Ceresa alta	-
Ceresa bubalus	buffalo tree hopper
Stictocephala inermis	-
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Pseudococcus maritimus	grape mealybug
Hymenoptera	
Bethylidae	
Goniozus sp.	-
Eulophidae	
Colpoclypeus florus	-
Ichneumonidae	
Phytodietus celcissimus	-
Trichogrammatidae	
Trichogrammatomyia tortricis	-
Isoptera	
Kalotermitidae	
Bifiditermes beesoni	-
Rhinotermitidae	
Coptotermes heimi	-
Heterotermes indicola	-
Termitidae	
Microtermes unicolor	termite
Odontotermes lokanandi	termite
Lepidoptera	
Arctiidae	
Hyphantria cunea	fall webworm
Choreutidae	
Choreutis pariana	apple leaf skeletonizer
Cossidae	
Cossus cossus	goat moth
Gelechiidae	
Anarsia lineatella	peach twig borer
Recurvaria nanella	lesser bud moth
Recurvaria syrictis	bud moth
Geometridae	
Alsophila pometaria	fall cankerworm
Operophtera brumata	winter moth
Gracillariidae	
Phyllonorycter cerasicolella	leafminer
Lasiocampidae	
Malacosoma californicum fragile	tent caterpillar
Malacosoma disstria	forest tent caterpillar
Limacodidae	
Doratifera vulnerans	mottled cup moth
Latoia latistriga	plum slug
Lymantriidae	
Orgyia antiqua	rusty tussock moth
Orgyia gonostigma	vapourer moth
Metarbelidae	
Indarbela quadrinotata	wood-borer moth
Noctuidae	
Alabama argillacea	cotton leafworm
Mamestra brassicae	cabbage moth
Peridroma saucia	variegated cutworm
Schizura concinna	redhumped caterpillar
Spodoptera frugiperda	fall armyworm

Xestia c-nigrum	spotted cutworm
Notodontidae	
Datana ministra	yellow-necked caterpillar
Oecophoridae	
Cryptophasa melanostigma	fruit tree borer
Maroga melanostigma	fruit tree borer
Papilionidae	
Papilio rutulus	-
Pyralidae	
Conogethes punctiferalis	yellow peach moth
Euzophera bigella	quince moth
Euzophera semifuneralis	American plum borer
Ostrinia nubilalis	European corn borer
Saturniidae	
Antheraea polyphemus	emperor moth
Sesiidae	
Synanthedon exitiosa	peach tree borer
Synanthedon pictipes	lesser peach tree borer
Sphingidae	
Sphinx drupiferarum	plum sphinx
Tortricidae	
Acleris minuta	yellow headed fireworm
Adoxophyes orana	reticulated tortrix
Archips argyrospilus	fruit tree leafroller
Archips oporanus	fruit tree tortrix
Archips podanus	fruit tree tortrix
Archips purpuranus	-
Archips rosanus	rose leafroller
Argyrotaenia citrana	orange tortrix
Argyrotaenia ljungiana	grey red-barred tortrix
Argyrotaenia velutinana	red-banded leafroller
Choristoneura albaniana	leafroller
Choristoneura rosaceana	oblique-banded leafroller
Cryptoptila immersana	ivy leafroller
Cydia caryana	hickory shuckworm
Cydia packardi	cherry fruitworm
Cydia prunivora	lesser appleworm
Epichoristodes acerbella	South African carnation worm
Hedya dimidioalba	green budworm
Pandemis cerasana	barred fruit tree tortrix
Pandemis heparana	dark fruit tree tortrix
Platynota flavedana	apple bud moth
Platynota idaeusalis	tufted apple bud moth
Proeulia auraria	grapevine leafroller
Proeulia chrysopteris	grapevine leaf-rolling tortricid
Sparganothis reticulatana	leafroller
Spilonota ocellana	eyespotted bud moth
Tortrix capensana	tortricid moth
Tortrix cinderella	-
Orthoptera	
Acrididae	
Acanthacris ruficornis	-
Phymateus leprosus	bush locust
Thysanoptera	
Thripidae	
Frankliniella tritici	eastern flower thrips
Taeniothrips meridionalis	thrips

Thrips angusticeps	cabbage thrips
Thrips flavus	flower thrips

Mite
Arachnida
Acarina
Acaridae

Caloglyphus haripuriensis	acarid mite

Eriophyidae

Acalitus phloecoptes	plum bud gall mite
Aceria chinensis	-
Aculus fockeui [vector]	eriophyid mite
Cenopalpus lanceolatisetae	-
Cenopalpus pulcher	flat scarlet mite
Epitrimerus pyri	pear leaf blister mite
Eriophyes armeniacus	-
Eriophyes catacardiae	-
Eriophyes emarginatae	eriophyid mite
Eriophyes inaequalis	eriophyid mite
Eriophyes padi	eriophyid mite
Eriophyes similis	eriophyid mite
Phytoptus insidiosus	pineapple fruit mite

Tarsonemidae

Tarsonemus pruni	tarsonemid mite
Tarsonemus randsi	-
Tarsonemus smithi	tarsonemid mite

Tenuipalpidae

Rhinotergum schestovici	mite
Tenuipalpus persicae	false spider mite
Tenuipalpus taonicus	false spider mite

Tetranychidae

Aplonobia citri	Japanese citrus rust mite
Bryobia rubrioculus f. sp. *prunicola*	brown mite
Eotetranychus boreus	apricot spider mite
Eotetranychus carpini	tetranychid mite
Eotetranychus carpini borealis	yellow spider mite
Eotetranychus pruni	hickory scorch mite
Eotetranychus uncatus	Lewis spider mite
Eutetranychus africanus	African red spider mite
Eutetranychus enodes	tetranychid mite
Eutetranychus orientalis	pear leaf blister mite
Oligonychus gossypii	tetranychid mite
Oligonychus mangiferus	mango spider mite
Tetranychus canadensis	fourspotted spider mite
Tetranychus kanzawai	kanzawa mite
Tetranychus neocaledonicus	Mexican spider mite
Tetranychus pacificus	Pacific spider mite
Tetranychus viennensis	twospotted mite

Nematode
Secernentea
Tylenchida
Pratylenchidae

Pratylenchus brachyurus	root lesion nematode

Fungus
Ascomycota

Calosphaeriales	
Calosphaeriaceae	
Calosphaeria pulchella	--
Diaporthales	
Valsaceae	
Apiognomonia erythrostoma	--
Diaporthe decorticans	-
Diaporthe pennsylvanica	-
Diaporthe pruni	-
Leucostoma cincta (anamorph *Cytospora cincta*)	canker
Dothideales	
Botryosphaeriaceae	
Auerswaldiella puccinioides	-
Mycosphaerellaceae	
Mycosphaerella cerasella (anamorph *Cercospora circumscissa*)	leaf spot
Mycosphaerella nigerristigma	-
Mycosphaerella pruni-persicae (anamorph *Miuraea persica*)	frosty mildew
Schizothyriaceae	
Schizothyrium pomi (anamorph *Zygophiala jamaicensis*)	fly speck
Zopfiaceae	
Caryospora putaminum	--
unknown Dothideales	
Apiosporina morbosa	black knot
Erysiphales	
Erysiphaceae	
Sphaerotheca armeniaca	--
Leotiales	
Dermateaceae	
Blumeriella jaapii (anamorph *Phloeosporella padi*)	shot-hole
Dermea cerasi (anamorph *Foveostroma drupacearum*)	--
Sclerotiniaceae	
Grovesinia pyramidalis (anamorph *Cristulariella moricola*)	target spot
Lambertella jasmini	rot
Lambertella pruni	fruit rot
Monilinia fructigena (anamorph *Monilia fructigena*)	European brown rot
Monilinia kusanoi	leaf blight
Monilinia seaveri	twig blight
Phyllachorales	
Phyllachoraceae	
Polystigma rubrum	--
Polystigma ussuriensis	--
Taphrinales	
Taphrinaceae	
Taphrina armeniacae	witches' broom
Taphrina communis	bladder fruit
Taphrina confusa	--
Taphrina flectans	-
Taphrina pruni-subcordatae	--
Xylariales	
Xylariaceae	
Xylaria longiana	--

Xylaria mali	black root rot
unknown Ascomycota	
Hyponectriaceae	
Physalospora perseae	peach blister canker
Basidiomycota: Agaricomycetes	
Hymenochaetales	
Hymenochaetaceae	
Phellinus noxius	brown root rot
Basidiomycota: Basidiomycetes	
Agaricales	
Strophariaceae	
Pholiota squarrosa	wood decay
Tricholomataceae	
Armillaria bulbosa	armillaria root rot
Armillaria heimii	-
Armillaria luteobubalina	armillaria root rot
Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)	armillaria root rot
Armillaria ostoyae	armillaria root rot
Armillaria tabescens	armillaria root rot
Ganodermatales	
Ganodermataceae	
Ganoderma brownii	wood decay
Ganoderma lobatum	white soft decay
Ganoderma lucidum (anamorph *Polyporus lucidus*)	wood rot
Ganoderma zonatum	butt and stem rot
Hericiales	
Gloeocystidiellaceae	
Gloeocystidiellum porosum	--
Laxitextum bicolor	white rot
Hymenochaetales	
Hymenochaetaceae	
Phellinus igniarius	-
Phellinus pomaceus	white heart rot
Phellinus prunicola	-
Microascales	
Ceratocysticaceae	
Ceratocystis fimbriata	-
Poriales	
Coriolaceae	
Coriolopsis gallica	white rot
Fomes fomentarius	wood decay
Fomitopsis cajanderi	wood decay
Fomitopsis meliae	wood decay
Fomitopsis pinicola	brown cubical rot
Fomitopsis rosea	brown pocket rot
Fomitopsis spraguei	butt rot
Gloeophyllum sepiarium	brown rot
Gloeophyllum trabeum	brown rot
Heterobasidion annosum (anamorph *Spiniger meineckellum*)	wood rot
Laetiporus sulphureus (anamorph *Sporotrichum versisporum*)	brown cubical rot
Oxyporus latemarginatus	wood rot
Trametes velutina	dieback
Trichaptum biforme	white rot

Tyromyces chioneus	white rot
Tyromyces tephroleucus	-
Polyporaceae	
Polyporus squamosus	wood rot
Stereales	
Corticiaceae	
Phanerochaete arizonica	white rot
Phanerochaete crassa	white rot
Cyphellaceae	
Maireina marginata	wood decay
Hyphodermataceae	
Schizopora paradoxa	wood rot
Sistotremataceae	
Phymatotrichopsis omnivora	Texas root rot
Steccherinaceae	
Irpex lacteus	wood rot
Stereaceae	
Stereum strigoso-zonatum	silver leaf
Thelephorales	
Thelephoraceae	
Corticium koleroga	web blight
Basidiomycota: Teliomycetes	
Uredinales	
Uropyxidaceae	
Tranzschelia pruni-spinosae	leaf rust
unknown Uredinales	
Leucotelium pruni-persicae	leucotelium white rust
Oomycota	
Pythiaceae	
Pythaceae	
Phytophthora ramorum	Sudden oak death disease
Zygomycota: Zygomycetes	
Mucorales	
Gilbertellaceae	
Gilbertella persicaria	fruit rot
Mucoraceae	
Rhizopus circinans	--
mitosporic fungi	
unknown mitosporic fungi	
unknown mitosporic fungi	
Catenophora pruni	--
Fumago vagans	--
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Coniothyrium amygdali	--
Coniothyrium prunicolum	coniothyrium disease
Cytospora persicae	--
Diplodia pruni	--
Diplodia vulgaris	--
Diplodina persicae	--
Nattrassia mangiferae	stem-end rot
Phoma persicae	leaf spot
Phomopsis cinerascens	fig canker
Phomopsis perseae	fruit rot
Phyllosticta congesta	phyllosticta rot
Phyllosticta laurocerasi	leaf spot

Phyllosticta persicae	target leaf spot
Phyllosticta serotina	-
Phyllosticta virginiana	--
Septoria pruni	--
unknown Coelomycetes	
unknown Coelomycetes	
Asteromella mali	--
Cylindrosporium nuttallii	-
Gloeosporium laeticolor	anthracnose
Melanconium cerasinum	-
Pestalotia laurocerasi	leaf spot
Rhodosticta quercina	peach canker
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria mali	alternaria blotch
Cercospora effusa	-
Cercospora rubrotincta	leaf spot
Clasterosporium degenerans	--
Mycocentrospora cladosporioides	fruit spot
Phialophora parasitica	stem dieback
Moniliaceae	
Monilia angustior	rot
Monilia implicata	rot
unknown Hyphomycetes	
unknown Hyphomycetes	
Aureobasidium prunicola	fruit rot
Candida inconspicua	sour pit
unknown fungi	
unknown fungi	
unknown fungi	
Morrisographium persicae	--
Bacterium	
Bacillaceae	
Bacillus mesentericus vulgatus	-
Pseudomonadaceae	
Pseudomonas amygdali	-
Pseudomonas syringae pv. *cerasicola*	bacterial gall
Spiroplasmataceae	
Spiroplasma citri	citrus stubborn
Xanthomonadaceae	
Xylella fastidiosa	Pierce's disease
Virus	
American plum line pattern virus	-
Apple stem grooving virus [Prunus-infecting strain]	-
Apricot deformation mosaic virus	-
Apricot latent virus	-
Carnation Italian ringspot virus	-
Cherry Hungarian rasp leaf virus	-
Cherry leaf roll virus [strains not in New Zealand]	-
Cherry line pattern and leaf curl virus	-
Little cherry virus 2	*Little cherry virus 3*
Cherry mottle leaf virus	-
Cherry rasp leaf virus [strains not in New Zealand]	-
Cherry rosette virus	*Cherry rosette disease associated virus*

Cherry rough fruit virus	-
Cherry rusty mottle associated virus	*Cherry rusty mottle virus*
Cherry twisted leaf associated virus	*Cherry twisted leaf virus*
Myrobalan latent ringspot virus	-
Peach enation virus	-
Peach mosaic virus	-
Peach rosette mosaic virus	-
Peach yellow leaf virus	-
Petunia asteroid mosaic virus	-
Plum bark necrosis stem pitting-associated virus	-
Plum pox virus	-
Prunus virus S	-
Raspberry ringspot virus	-
Sowbane mosaic virus	-
Stocky prune virus	-
Tomato bushy stunt virus	-
Tomato ringspot virus	-

Viroid

Hop stunt viroid	-

Phytoplasma

Apricot chlorotic leafroll phytoplasma	-
Apricot decline phytoplasma	-
Apricot witches broom phytoplasma	-
Cherry albino phytoplasma	-
Cherry blossom anomaly	-
Cherry lethal yellows	-
Cherry Moliere disease phytoplasma	-
Cherry western X anomaly	-
European stone fruit yellows phytoplasma	-
Peach decline phytoplasma	-
Peach red suture phytoplasma	-
Peach rosette phytoplasma	-
Peach vein clearing phytoplasma	-
Peach X-disease phytoplasma	-
Peach yellow leafroll phytoplasma	-
Peach yellows phytoplasma	-
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	-

Inspection, Testing and Treatment Requirements for *Prunus*

ORGANISM TYPES	**MPI-ACCEPTED METHODS** (See notes below)
Insects	Visual inspection AND **one** of the approved insecticide treatments (Refer to "Approved Treatments for *Prunus*")
Mite	Visual inspection AND **one** of the approved miticide treatments (Refer to "Approved Treatments for *Prunus*")
Fungi	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility. Growing season inspection in PEQ for symptom expression AND plating on potato dextrose agar (PDA). *For plating (on PDA), leaf material samples for testing to be collected from actively growing plants. Each plant in PEQ must be sampled and tested separately.*
Ceratocystis fimbriata sensu lato complex (strains not in New Zealand)	Growing season inspection in PEQ for disease symptom expression AND plating on suitable isolation media or PCR. For cuttings, two separate tests are required. For plants imported as tissue culture, only Test 2 is required. Test 1 (applies to cuttings only): occurs on cuttings on arrival in New Zealand. Test 2 (applies to plants from cuttings or tissue culture): stem material samples for testing to be collected from actively growing plants. *For plating, each cutting, or plant in PEQ, must be sampled and tested separately.*
Oomycetes	
Phytophthora ramorum	PCR. For cuttings, two separate tests are required. For plants imported as tissue culture, only Test 2 is required. Test 1 (applies to cuttings only): occurs on cuttings on arrival in New Zealand; the cuttings must be held at the diagnostic facility until they have been tested and found negative. Test 2 (applies to plants from cuttings or tissue culture): leaf material samples for testing to be collected from actively growing plants.
Bacteria	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility.
Bacillus mesentericus vulgatus	Growing season inspection in PEQ for disease symptom expression.
Pseudomonas amygdali	Growing season inspection in PEQ for disease symptom expression.
Pseudomonas syringae pv. *cerasicola*	Growing season inspection in PEQ for disease symptom expression AND plating on King's B medium.
Spiroplasma citri	Growing season inspection in PEQ for disease symptom expression.
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR.
Virus	
American plum line pattern virus	ELISA or PCR AND herbaceous indicators *Chenopodium quinoa*, *Cucumis sativus* and *Nicotiana occidentalis*
Apple stem grooving virus [*Prunus*-infecting strain]	ELISA or PCR AND herbaceous indicator *Chenopodium quinoa*
Apricot deformation mosaic virus	Woody indicators
Apricot latent virus	Woody indicator (*Prunus persica* cv. GF305) or herbaceous indicator (*Nicotiana occidentalis*)
Carnation Italian ringspot virus	Woody indicator (*Prunus avium* cvs. Bing and Sam) or herbaceous indicator (*Chenopodium quinoa*)
Cherry Hungarian rasp leaf virus	Woody indicator (*Prunus avium* cv. Bing) or herbaceous indicator (*Cucumis sativum*)
Cherry leaf roll virus [strains not in New Zealand]	Woody indicators AND ELISA or PCR AND herbaceous indicators *Chenopodium quinoa*, *Cucumis sativus* and *Nicotiana benthamiana*
Cherry line pattern and leaf curl virus	Woody indicators

Cherry mottle leaf virus	Woody indicators AND ELISA or PCR AND herbaceous indicator *Chenopodium quinoa*
Cherry rasp leaf virus [strains not in New Zealand]	Woody indicators AND herbaceous indicators *Chenopodium quinoa, Cucumis sativus* and *Nicotiana benthamiana*
Cherry rosette disease associated virus	Woody indicators
Cherry rough fruit virus	Woody indicator (*Prunus avium* cv. Bing)
Cherry rusty mottle virus	Woody indicators
Cherry twisted leaf virus	Woody indicators AND herbaceous indicator *Nicotiana occidentalis*
Little cherry virus 2	Woody indicators
Myrobalan latent ringspot virus	Woody indicators AND herbaceous indicators *Chenopodium quinoa, Cucumis sativus* and *Nicotiana benthamiana*
Peach enation virus	Woody indicators AND herbaceous indicator *Chenopodium quinoa*
Peach mosaic virus	Woody indicators AND herbaceous indicator *Chenopodium quinoa*
Peach rosette mosaic virus	Woody indicators AND ELISA or PCR AND herbaceous indicators *Chenopodium quinoa, Cucumis sativus* and *Nicotiana benthamiana*
Peach yellow leaf virus	Woody indicator (*Prunus persica* cv. GF305).
Petunia asteroid mosaic virus	Woody indicators
Plum bark necrosis stem pitting-associated virus	Woody indicators
Plum pox virus	Woody indicators AND ELISA or PCR (two sets) AND herbaceous indicator *Nicotiana benthamiana*
Prunus virus S	Woody indicator (*Prunus persica* cv. GF305) or herbaceous indicator (*Chenopodium quinoa*)
Raspberry ringspot virus	Woody indicators AND herbaceous indicators *Chenopodium quinoa, Cucumis sativus* and *Nicotiana benthamiana*
Sowbane mosaic virus	Herbaceous indicator *Chenopodium quinoa*
Stocky prune virus	Woody indicator (*Prunus persica* cv. GF305)
Tomato bushy stunt virus	ELISA or PCR AND herbaceous indicators *Chenopodium quinoa, Cucumis sativus* and *Nicotiana benthamiana*
Tomato ringspot virus	Woody indicators AND ELISA or PCR AND herbaceous indicators *Chenopodium quinoa, Cucumis sativus* and *Nicotiana benthamiana*
Viroid	
Hop stunt viroid	Hybridization or PAGE or PCR.
Phytoplasmas	Nested PCR or real time PCR using universal phytoplasma primers.
Diseases of unknown aetiology	Woody indicators AND growing season inspection in PEQ for disease symptom expression.

Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. 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.
3. Woody indexing:

Woody indicator	***Prunus armeniaca***	***Prunus avium* & *Prunus cerasus***	***Prunus domestica* & *Prunus salicina***	***Prunus dulcis***	**All other *Prunus* spp.**
***Prunus armeniaca* cv. Tilton**	**x3**				**x3**
***Prunus avium* cv. Bing**		**x3**			
***Prunus avium* cv. Sam**		**x3**			**x3**

***Prunus domestica* cv. Shiroplum**		**x3**	**x3**		**x3**
***Prunus persica* 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.

4. Molecular tests for viroids. Tests are to be carried out on dormant, grafted cuttings during the winter after importation.
5. 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.
6. 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.
7. 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.
8. 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.
9. With prior notification, MPI will accept other internationally recognised testing methods.

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:

Approved Countries: All

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

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

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 6 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. Subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

Scientific name	Commodity Sub-class	Date Issued
Pyrus communis	Cuttings (dormant)	12 June 1998

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:

Approved 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*; *Ceratocystis fimbriata; 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 3B
Minimum Period: 3 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Quercus* genus

b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. Subject to examination at a MPI-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 *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:

Approved Countries: All

Quarantine Pests: *Phymatotrichopsis omnivora*; Virus diseases; *Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

B. For Dormant Bulbs from Australia and South Africa:

OPTION 1:
No import permit is required.
PEQ: None

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

b. Additional Declaration: "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

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option

C. For Dormant Bulbs from the USA:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for virus diseases: Additional Declaration: "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."

c. Conditions for *Phymatotrichopsis omnivora:*

OPTION 1

i) Additional declaration: "The dormant bulbs have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

OPTION 2

i) Additional declaration: "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.

D. For Dormant Bulbs from all other Countries:

OPTION 1:
PEQ: Level 1
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

b. Conditions for *Phymatotrichopsis omnivora*: Additional declaration: "The dormant bulbs have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*"

c. Additional declaration: "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

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Phymatotrichopsis omnivora:*
i) Additional declaration: "The dormant bulbs have been sourced from a "Pest free area", 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.

c. Additional declaration: "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".

E. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. 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 *Rhododendron*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Microsphaera* spp.; *Ovulinia azaleae*; *Phellinus noxius; Pytophthora ramorum*; Uredinales

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

A. For Whole Plants:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Rhododendron xobtusum*

c. Measures for *Microsphaera* spp. and rust diseases:

i. Additional declaration:
"*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) _".
Note: Applies to the following rust diseases: *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

ii. All visible flower buds are to be removed prior to export;
and
On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at a MPI-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

B. For Cuttings:
PEQ: Level 2
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Measures for *Microsphaera* spp. and rust diseases:

i. Additional declaration:
"*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) _".
Note: Applies to the following rust diseases: *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

ii. All visible flower buds are to be removed prior to export;
and
On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at a MPI-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

C. For Tissue Cultures:

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

Scientific name	Commodity Sub-class	Date Issued
Ribes nigrum	Whole Plants	19 June 1998
Ribes uva-crispa	Whole Plants	19 June 1998

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.

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

Whole plants, cuttings (non-dormant and dormant cuttings), plants in tissue culture

2. Quarantine pests

Fungi	*Phellinus noxius;* Pucciniales
Bacteria	*Xylella fastidiosa*
Viruses	*Blackberry chlorotic ringspot virus; Raspberry ringspot virus* (strains not in New Zealand)*; Rose rosette virus*
Phytoplasmas	*'Candidatus* Phytoplasma asteris'*; 'Candidatus* Phytoplasma aurantifolia'*; 'Candidatus* Phytoplasma mali'*; 'Candidatus* Phytoplasma prunorum'*; 'Candidatus* Phytoplasma rubi'

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

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

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

c. Conditions for viruses:
   i) Additional declaration: "[*Virus name*] is absent/not known to occur in __ [name of country] __"

   OR

   ii) Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*"

d. Conditions for phytoplasmas: Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*"

e. Conditions for Pucciniales:
   i) Additional declaration: "The plants have been dipped in propiconazole at the rate of 5g a.i. per 10 litres of water"

   OR

   ii) For countries where propiconazole is <u>not</u> approved; additional declaration: "The plants have been [dipped/sprayed until dripping] in [fungicide active ingredient]; a broad range systemic fungicide suitable for treating rust fungi from the Pucciniales order at the rate of [specify rate] at least 48 hours prior to shipment"

   OR

   iii) With prior arrangement with MPI, the plants may be dipped on arrival in New Zealand in propiconazole (5g a.i. per 10 litres of water); refer to section 2.3.2 "Treatment and Testing of the Consignment".

B. For Non-dormant Cuttings:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

b. Conditions for viruses:
   i) Additional declaration: "[*Virus name*] is absent/not known to occur in __ [name of country] __"
   OR
   ii) Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*"

c. Conditions for phytoplasmas: Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*"

d. Conditions for Pucciniales:
   i) Additional declaration: "The plants have been dipped in propiconazole at the rate of 5g a.i. per 10 litres of water"
   OR
   ii) For countries where propiconazole is <u>not</u> approved; additional declaration: "The plants have been [dipped/sprayed until dripping] in [fungicide active ingredient]; a broad range systemic fungicide suitable for treating rust fungi from the Pucciniales order at the rate of [specify rate] at least 48 hours prior to shipment"
   OR
   iii) With prior arrangement with MPI, the plants may be dipped on arrival in New Zealand in propiconazole (5g a.i. per 10 litres of water); refer to section 2.3.2 "Treatment and Testing of the Consignment".

C. For Dormant Cuttings:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

b. Conditions for viruses:
   i) Additional declaration: "[*Virus name*] is absent/not known to occur in __ [name of country] __"
   OR
   ii) Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*"

c. Conditions for phytoplasmas: Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*"

D. For Plants in Tissue Culture:
PEQ: Level 2
Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)

b. Conditions for viruses:
   i) Additional declaration: "[*Virus name*] is absent/not known to occur in __ [name of country] __"
   OR
   ii) Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment

Requirements for *Rosa*"

c. Conditions for phytoplasmas: Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*"

Inspection, Testing and Treatment Requirements for Rosa

ORGANISM	MPI ACCEPTABLE METHODS	Comments
Insects	Visual inspection **AND** approved insecticide treatments as described in section 2.2.1.6 of the Basic conditions	Applies to whole plants and cuttings only
Mites	Visual inspection **AND** approved miticide treatments as described in the section 2.2.1.6 of the Basic conditions	Applies to whole plants and cuttings only
Fungus		
Phellinus noxius	Refer to section 2.2.1.13 "Measures for *Phellinus noxius"*	Applies to whole plants only
Pucciniales	Treatment; refer to part A and B of the *Rosa* schedule	Applies to whole plants and non-dormant cuttings only
Bacterium		
Xylella fastidiosa	Refer to section 2.2.1.12 "Measures for *Xylella fastidiosa"*	Applies to whole plants and cuttings only. Testing requirements for *Xylella fastidiosa* are identified in section 2.2.1.12.
	Refer to section 2.2.2.5 "Measures for *Xylella fastidiosa* on tissue culture*"*	Applies to tissue culture only. Testing requirements for *Xylella fastidiosa* are identified in section 2.2.2.5.
Virus		
Blackberry chlorotic ringspot virus	PCR	Applies to whole plants, cuttings, and tissue culture
Raspberry ringspot virus (strains not in New Zealand)	PCR	Applies to whole plants, cuttings, and tissue culture
Rose rosette virus	PCR	Applies to whole plants, cuttings, and tissue culture
Phytoplasmas	Nested or real-time PCR using universal phytoplasma primers	Applies to whole plants, cuttings, and tissue culture

Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. **Sample collection:** 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.
3. **Time of testing:** Virus testing must be carried out using the new season's growth in the spring, or spring-like conditions. Bacteria and phytoplasmas testing must be carried out during late summer to early autumn, or during late summer-like conditions.

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 *Rubus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

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

Cuttings (runner tips and stem cuttings only); Plants in tissue culture

Rubus can be imported into Level 2 post entry quarantine from MPI-accredited facilities, or into Level 3B post entry quarantine from non-accredited facilities.

2. Pests of *Rubus*

Refer to the pest list.

3. Entry conditions for:

3.1 *Rubus* cuttings and tissue culture from offshore MPI-accredited facilities in any country

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

(i) *Documentation*

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Rubus* 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 MPI have been undertaken.

The *Rubus* 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 MPI and the [name of the MPI-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 *Rubus* 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 MPI and the [name of the MPI-accredited facility].

AND

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

(v) *Post-entry quarantine*

PEQ: All *Rubus* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 6 months (active continuous growth) 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 *Rubus* 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 *Rubus* 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 MPI have been undertaken.

The *Rubus* 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 [cuttings only]. No additional declarations are required.

(iv) *Post-entry quarantine*

PEQ: All *Rubus* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 16 months (cuttings) in post-entry quarantine. Tissue cultures must be exflasked, and the exflasked plant material grown in a PEQ greenhouse during the quarantine period. During this time, imported material will be inspected, treated and/or tested for regulated pests as specified in the "Inspection, Testing and Treatment Requirements for *Rubus*", 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 *Rubus*

REGULATED PESTS (actionable)

Insects	
Insecta	
Coleoptera	
Attelabidae	
Rhynchites germanicus	strawberry rhynchites
Buprestidae	
Agrilus aurichalceus	raspberry buprestid
Agrilus rubicola	raspberry buprestid
Agrilus ruficollis	red-necked cane borer
Byturidae	
Byturus ochraceus	raspberry beetle
Byturus rubi	eastern raspberry fruitworm
Byturus tomentosus	raspberry beetle
Byturus unicolor	raspberry fruitworm
Byturus urbanus	raspberry beetle
Cerambycidae	
Coreus marginatus	longhorn beetle
Oberea bimaculata	raspberry caneborer
Chrysomelidae	
Batophila aerata	raspberry flea beetle
Batophila rubi	raspberry flea beetle
Brachypnoea exilis grita	flea beetle
Nodonota margaretae	leaf beetle
Curculionidae	
Anthonomus rubi	apple blossom weevil
Anthonomus signatus	blossom weevil
Merhynchites bicolor	rose curculio
Merhynchites wickhami	curculio
Nemocestes incomptus	strawberry root weevil
Otiorhynchus clavipes	red-legged weevil
Otiorhynchus singularis	clay covered weevil
Rhynchaenus fagi	strawberry weevil
Scleropterus verecundus	weevil
Nitidulidae	
Meligethes hebes	sap beetle
Scarabaeidae	
Cetonia aurata pisana	scarabaeid beetle
Cotinis nitida	green June beetle
Macrodactylus subspinosus	rose chafer
Phyllopertha horticola	garden chafer
Popillia japonica	Japanese beetle
Diptera	
Agromyzidae	
Agromyza spiraeae	rose leafminer
Anthomyiidae	
Pegomya rubivora	raspberry cane maggot
Cecidomyiidae	
Contarinia agrimoniae	midge
Contarinia rubicola	blackberry flower midge
Dasineura plicatrix	blackberry leaf midge
Lasioptera rubi	raspberry gall midge
Resseliella theobaldi	raspberry midge
Hemiptera	
Anthocoridae	
Orius vicinus	raspberry bug
Miridae	
Lygocoris pabulinus	common green caspid

Lygus lineolaris	tarnished plant bug
Macrolophus rubi	mirid
Psallus variabilis	mirid
Pentatomidae	
Dolycoris baccarum	stink bug
Pentatoma rufipes	forest bug
Homoptera	
Aetalionidae	
Aetalion reticulatum	-
Aphididae	
Amphorophora agathonica	strawberry aphid
Amphorophora idaei	large raspberry aphid
Amphorophora rubitoxica	aphid
Aphis rubicola [vect.]	raspberry aphid
Aphis ruborum	permanent blackberry aphid
Macrosiphum funestum	rose aphid
Matsumuraja hirakurensis	raspberry aphid
Cicadellidae	
Dikrella californica	blueberry leafhopper
Dikrella cruentata	leafhopper
Edwardsiana rosae	rose leafhopper
Erythroneura rubiphylla	leafhopper
Macropsis fulcatus	leafhopper
Macropsis fuscula	boysenberry leafhopper
Metascarta impressifrons	leafhopper
Typhlocyba spp.	rubus leafhoppers
lssidae	
Mycterodus serbicus	plant bug
Psyllidae	
Trioza tripunctata	blackberry psyllid
Trioza trisignata	psyllid
Hymenoptera	
Cephidae	
Hartigia albomaculata	sawfly borer
Cynipidae	
Diastrophus spp.	stem gall cynipids
Pamphilidae	
Pamphilius sitkensis	sawfly
Pergidae	
Philomastix macleaii	bramble sawfly
Tenthredinidae	
Allantus cinctus	banded rose sawfly
Emphytus calceatus	sawfly
Empria tridens	raspberry sawfly
Metallus pumilus	raspberry leaf-mining sawfly
Metallus rohweri	raspberry leafmining sawflies
Metallus rubi	blackberry leafminer
Monophadnoides geniculatus	raspberry sawfly
Perineura rubi	sawfly
Sterictiphora furcata	sawfly
Lepidoptera	
Geometridae	
Itame wauaria	v-moth
Operophtera bruceata	Bruce spanworm
Operophtera brumata	European winter moth
Hepialidae	
Hepialus humuli	ghost swift moth
Incurvariidae	
Lampronia rubiella	raspberry bud moth
Lymantriidae	
Euproctis chrysorrhoea	brown-tail moth
Lymantria dispar	Asian gypsy moth

Orgyia antiqua	rusty tussock moth
Megalopygidae	
Megalopyge lanata	-
Nepticulidae	
Stigmella aurella	-
Stigmella splendidissimella	-
Noctuidae	
Acronicta psi	grey dagger moth
Agrotis segetum	turnip moth
Cosmia trapezina	dun-bar moth
Eudocima tyrannus	Akebia leaf-like moth
Graphiphora augur	double dart moth
Melanchra persicariae	dot moth
Oraesia emarginata	fruit-piercing moth
Papaipema nebris	stalk borer
Peridroma saucia	variegated cutworm
Spirama retorta	fruit sucking moth
Xestia c-nigrum	spotted cutworm
Notodontidae	
Phalera bucephala	buff-tip moth
Saturniidae	
Saturnia pavonia	silk moth
Sesiidae	
Pennisetia hylaeiformis	raspberry crownborer
Pennisetia marginata	raspberry crownborer
Synanthedon bibionipennis	strawberry crown moth
Tortricidae	
Acleris comariana	leafroller
Acleris laterana	broad barred button moth
Archips oporanus	fruit tree tortix
Argyrotaenia citrana	orange tortix
Choristoneura rosaceana	obliquebanded leafroller
Cnephasia longana	omnivorous leaftier
Epiblema uddmanniana	bramble shoot borer
Olethreutes concinnana	leafroller
Olethreutes furfuranum	leafroller
Pandemis cerasana	leafroller
Spilonota ocellana	eye-spotted bud moth
Orthoptera	
Gryllidae	
Oecanthus nigricornis	blackhorned tree cricket
Oecanthus pellucens	blackhorned tree cricket
Phasmida	
Phasmatidae	
Carausius morosus	wingless stick insect
Thysanoptera	
Thripidae	
Thrips flavus	flower thrips
Mites	
Arachnida	
Acarina	
Eriophyidae	
Cenopalpus pseudospinosus	rust mite
Epitrimerus gibbosus	eriophyid mite
Eriophyes rubi	eriophyid mite
Phyllocoptes gibbosus	eriophyid mite
Phyllocoptes gracilis	raspberry mite
Phyllocoptes rubi	eriophyid mite
Eupodidae	
Neotetranychus rubi	raspberry mite
Tetranychidae	

Amphitetranychus viennensis	hawthorn spider mite
Nematodes	
Adenophorea	
Dorylaimida	
Longidoridae	
Xiphinema bakeri	dagger nematode
Xiphinema barense	dagger nematode
Secernentea	
Tylenchida	
Criconematidae	
Criconemella axestis	-
Criconemella curvata	ring nematode
Criconemella denoudeni	-
Criconemella ornata	ring nematode
Criconemella sphaerocephala	ring nematode
Criconemella xenoplax	ring nematode
Dolichodoridae	
Tylenchorhynchus claytoni	tobacco stunt nematode
Hoplolaimidae	
Helicotylenchus platyurus	-
Hoplolaimus magnistylus	-
Scutellonema bradys	yam nematode
Pratylenchidae	
Hirschmanniella oryzae	rice root nematode
Fungi	
Ascomycota: Ascomycetes	
Diaporthales	
Valsaceae	
Gnomonia rostellata	-
Gnomonia rubi (anamorph Gloeosporium sp.)	cane canker, dieback
Gnomonia setacea	cane canker, dieback
Dothideales	
Leptosphaeriaceae	
Leptosphaeria thomasiana	cane blight
Melanconidaceae	
Sydowiella depressula	-
Mycosphaerellaceae	
Mycosphaerella confusa (anamorph Pseudocercospora rubi)	cercospora leaf spot
Mycosphaerella ligea	cane & leaf spot
Mycosphaerella rubi (anamorph Septoria rubi)	cane & leaf spot
Sphaerulina rubi (anamorph Cylindrosporium rubi)	-
Helotiales	
Dermateaceae	
Pyrenopeziza rubi	cane spot
Sclerotiniaceae	
Monilinia fructigena (anamorph Monilia fructigena)	brown rot
Meliolales	
Meliolaceae	
Appendiculella calstroma	black mildew
Unknown Ascomycetes	
-	
Hormotheca rubicola	-
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
Armillaria gallica	armillaria root rot
Armillaria mellea (anamorph Rhizomorpha subcorticalis)	shoestring root rot
Armillaria ostoyae	armillaria root rot
Russulales	
Lachnocladiaceae	

Scytinostroma galactinum	Scytinostroma galactinum
Unknown Basidiomycetes	
Gerwasia epiphylla	-
Basidiomycota: Urediniomycetes	
Stereales	
Sistotremataceae	
Phymatotrichopsis omnivora	Texas root rot
Uredinales	
Phragmidiaceae	
Arthuriomyces peckianus	orange rust
Gymnoconia nitens	rust
Hamaspora longissima	sub-tropical rust
Phragmidium alaskanum	-
Phragmidium bulbosum	rust
Phragmidium occidentale	-
Pucciniastraceae	
Pucciniastrum americanum	late leaf rust
Pucciniastrum arcticum	-
Mitosporic Fungi (Coelomycetes)	
Hapalosphaeria deformans	anther blight
Macrophoma rubi	-
Marssonina potentillae	leaf scorch
Phyllosticta carpogena	-
Mitosporic Fungi (Hyphomycetes)	
Fusicladium grayianum	-
Passalora monrosii	-
Pseudocercospora heteromalla	-
Pseudocercospora rubicola	-
Verticillium albo-atrum [severe strain]	verticillium wilt
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
Rhizopus sexualis	soft rot
Chromista	
Oomycota	
Pythiaceae	
Phytophthora idaei	-
Phytophthora ramorum	sudden oak death
Phytophthora rubi	root rot
Bacteria	
-	
-	
Enterobacteriaceae	
Erwinia amylovora f.sp. *rubi*	
Rhizobiaceae	
Agrobacterium rubi	cane gall
Xanthomonadaceae	
Xylella fastidiosa	Pierce's disease
Viruses	
-	
-	
-	
Black raspberry necrosis virus [strains not in New Zealand]	-
Blackberry calico virus	-
Blackberry chlorotic ringspot virus	-
Blackberry virus Y	-
Blackberry yellow vein associated virus	-
Bramble yellow mosaic virus	-

Cherry rasp leaf virus	-
Hawaiian rubus leaf curl virus	-
Raspberry latent virus	
Raspberry leaf curl virus	-
Raspberry ringspot virus	-
Rubus Chinese seedborne virus	-
Rubus chlorotic mottle virus	-
Rubus yellow net virus	-
Thimbleberry ringspot virus	-
Tobacco necrosis virus [strains not in New Zealand]	-
Tomato ringspot virus	-
Wineberry latent virus	-

Phytoplasmas

-

-

-

Black raspberry witches'-broom phytoplasma	-
Rubus stunt phytoplasma	-

Disease of unknown etiology

-

-

-

Alpine mosaic agent	-
Black raspberry streak disease	-
Raspberry chlorotic net disease	-
Raspberry yellow spot disease	-

*For organisms intercepted that are not listed within this pest list refer to the Biosecurity Organisms Register for Imported Commodities to determine the regulatory status.

Inspection, Testing and Treatment Requirements for *Rubus*

ORGANISM TYPES	MPI-ACCEPTABLE METHODS
Insects	Visual inspection **AND** approved insecticide treatments as described in section 2.2.1.6 of the Basic conditions [cuttings only]
Mites	Visual inspection **AND** approved miticide treatments as described in the section 2.2.1.6 of the Basic conditions [cuttings only] **or** binocular microscope inspection in PEQ [plants in tissue culture only]
Fungi	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility. Growing season inspection in PEQ for symptom expression
Chromista	Growing season inspection in PEQ for symptom expression
Bacteria	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility.
Erwinia amylovora f.sp. *rubi*	Growing season inspection for symptom expression **AND** PCR
Agrobacterium rubi	Growing season inspection for symptom expression
Xylella fastidiosa	Growing season inspection for symptom expression **AND** PCR
Viruses	
Black raspberry necrosis virus [strains not in New Zealand]	Country freedom **OR** Graft indexing using *Rubus occidentalis* **AND** PCR
Blackberry calico virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa*)
Blackberry chlorotic ringspot virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa*) **AND** PCR
Blackberry virus Y	Country freedom **OR** RT-PCR using BVY-specific primers
Blackberry yellow vein associated virus	Country freedom **OR** PCR
Bramble yellow mosaic virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa*)
Cherry rasp leaf virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa, Cucumis sativus*, and *Nicotiana clevelandii*) **AND** ELISA or PCR
Hawaiian rubus leaf curl virus	Country freedom **OR** Growing season inspection for symptom expression
Raspberry latent virus	Country freedom **OR** PCR
Raspberry leaf curl virus	Country freedom **OR** Graft indexing using *Rubus occidentalis*
Raspberry ringspot virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa, Cucumis sativus*, and *Nicotiana clevelandii*) **AND** ELISA or PCR
Rubus Chinese seedborne virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa, Cucumis sativus*, and *Nicotiana clevelandii*)
Rubus chlorotic mottle virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa*)
Rubus yellow net virus	Country freedom **OR** Graft indexing using *Rubus occidentalis* **AND** PCR
Thimbleberry ringspot virus	Country freedom **OR** Graft indexing using *Rubus occidentalis*
Tobacco necrosis virus [strains not in New Zealand]	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa, Cucumis sativus* and *Nicotiana clevelandii*)

Tomato ringspot virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa, Cucumis sativus*, and *Nicotiana clevelandii*) **AND** ELISA or PCR
Wineberry latent virus	Country freedom **OR** Herbaceous indexing (*Chenopodium quinoa*)
Phytoplasmas	
Black raspberry witches'-broom phytoplasma	Country freedom **OR** Nested PCR or real time PCR using universal phytoplasma primers
Rubus stunt phytoplasma	Country freedom **OR** Nested PCR or real time PCR using universal phytoplasma primers
Diseases of unknown etiology	
Alpine mosaic agent	Country freedom **OR** Growing season inspection for symptom expression
Black raspberry streak disease	Country freedom **OR** Growing season inspection for symptom expression
Raspberry chlorotic net disease	Country freedom **OR** Growing season inspection for symptom expression
Raspberry yellow spot disease	Country freedom **OR** Graft indexing using *Rubus occidentalis*

Notes:

1. **Country freedom** for regulated viruses, diseases of unknown etiology, and phytoplasmas will only be accepted when material is sourced from a MPI-accredited offshore facility. Country freedom must be endorsed by the exporting NPPO, and must be included in the agreement between MPI and the accredited offshore facility.
2. The **unit for testing** is defined in section 2.3.2.1.
3. **Tissue culture plantlets** must be potted up and grown in a MPI approved greenhouse, only material from the greenhouse is to be selected for testing.
4. **Growing season** is defined as an extended period of plant growth that includes environmental conditions equivalent to spring (longer wetter days and colder temperatures), summer (longer dryer days and warm temperatures), and autumn (shorter wetter days and warm but cooling temperatures).
5. **Virus testing** is to be conducted on new spring growth.
6. **Phytoplasma and bacteria testing** is to be conducted at the end of the summer growth period.
7. **Graft indexing**: Each *Rubus* plant must be tested by leaf-grafting or bottle-grafting onto two replicate indicator plants. The indicator plants must be maintained in a vigorous state of growth before and after grafting. Grafted plants are to be inspected regularly for symptoms of disease for at least 3 months.

   A single indicator plant must be left ungrafted as a negative control. It is recommended that a single indicator plant is budded with a positive control; the positive control is to be a non-regulated virus of *Rubus*.
8. **Herbaceous indicator plants**: *Chenopodium quinoa, Cucumis sativus,* and *Nicotiana clevelandii*. Two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator plants must be grown at 18-25ºC before and after inoculation and must be shaded for 24 hrs prior to inoculation. Post-inoculated indicator species must be held under appropriate glasshouse conditions for at least 4 weeks. Inoculated indicator plants must be inspected at least twice per week for symptoms of virus infection.

   A single plant of each indicator species must be inoculated with buffer solution as a negative control. It is recommended that a single plant of each indicator species is inoculated with a positive control; the positive control is to be a non-regulated virus of *Rubus*.
9. **Enzyme linked immunosorbent assay (ELISA) tests**. All ELISA tests must be validated using positive and negative controls prior to use in quarantine testing.

   Positive and negative controls must be used in all tests.
10. **Polymerase chain reaction (PCR) tests**. All PCR tests must be validated using positive and negative controls prior to use in quarantine testing. Positive and no template controls must be used in all tests. Ideally positive internal control primers and a negative plant control should also be used in PCR tests.

11. **Inspection** of the *Rubus* plants by the Operator of the PEQ facility for signs of pest and disease must be at least twice per week during periods of active growth. A record of inspections carried out by the Operator is to be kept and made available to the MPI Inspector on request.

12. **Other internationally recognised testing methods** may be accepted by MPI with prior notification.

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:

Approved Countries: All

Quarantine Pests: *Erwinia salicis; Melampsora* spp., *Phellinus noxius; Pytophthora ramorum*; *Xylella fastidiosa*

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

A. For Whole Plants:
PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Salix babylonica*

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. Subject to examination at a MPI-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 *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 for Primary Industries (MPI) 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 for Primary Industries (MPI) 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.

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*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Potato spindle tuber viroid*

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

A. For Whole Plants and Cuttings:
PEQ: Level 2
Minimum Period: 3 months
Additional declaration: "The nursery stock in this consignment has been sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Potato spindle tuber viroid*".

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 sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Potato spindle tuber viroid*".
OR
"The cultures have been derived from parent stock tested by molecular methods (PCR) and found free from *Potato spindle tuber viroid*".

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 offshore MPI-accredited facilities in any country
(i) *Documentation*
Import permit is required
Declaration for genetically modified organisms is required: Refer to section 5 of this schedule for details.
Phytosanitary requirements: 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 medium requirements*
The tissue culture medium must not contain charcoal.

(iii) *Phytosanitary requirements*
Before a phytosanitary certificate is issued, the exporting country national plant protection organisation (NPPO) must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken:

The *Solanum tuberosum* tissue cultures in the consignment have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND
- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the MPI-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.

(iv) *Additional declarations to the phytosanitary certificate*
"The *Solanum tuberosum* tissue cultures in this consignment have been:
- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of MPI-accredited facility];

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

(v) *Inspection, testing and treatments of the consignment*
For all imported *Solanum tuberosum* tissue cultures, MPI reserves the right to validate all testing and audit all treatment processes that are undertaken by a facility accredited by MPI for testing/treatment purposes. This applies to MPI-accredited facilities offshore and within New Zealand. Audits will be conducted on a regular basis and at the expense of the importer.

(vi) *Post-entry quarantine*
PEQ: Not required

3.2 *Solanum tuberosum* plants in tissue culture from non-accredited facilities in 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 medium requirements*
The tissue culture medium 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 Level 3B post entry quarantine facility. Refer to *Solanum tuberosum* Inspection and Testing Requirements following the *Solanum tuberosum* pest list.

(vi) *Post-entry quarantine*
PEQ: Level 3B
Quarantine Period: Tissue cultures must be deflasked into the greenhouse for the quarantine period. 3 months is an indicative minimum quarantine period; this is the time required to complete inspections and/or indexing to detect regulated pests. 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 MPI-accredited laboratories or facilities

For all imported *Solanum tuberosum* plants in tissue culture, MPI reserves the right to validate all testing and audit all treatment processes that are undertaken by a facility accredited by MPI for testing/treatment purposes. This applies to MPI-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	
Dickeya chrysanthemi pv. *chrysanthemi* (syn. *Erwinia chrysanthemi* pv. *chrysanthemi*)	bacterial soft rot
Dickeya chrysanthemi pv. *parthenii* (syn. *Erwinia chrysanthemi* pv. *parthenii*)	-
Dickeya paradisiaca (syn. *Erwinia chrysanthemi* pv. *paradisiaca*)	-
'Dickeya solani'	-
Pectobacterium betavasculorum (syn. *Erwinia carotovora* subsp. *betavasculorum*)	bacterial sudden yellows death
Pseudomonadaceae	
Xylella fastidiosa	
Viroids	
*Columnea latent viroid**	-
*Pepper chat fruit viroid**	
Potato spindle tuber viroid [transient]	-
*Tomato chlorotic dwarf viroid**	-
*Tomato planta macho viroid**	-
Viruses	
*Abutilon mosaic begomovirus**	-
Andean potato latent tymovirus	-
Andean potato mild mosaic tymovirus	-
Andean potato mottle comovirus	-
*Arracacha A nepovirus**	-
Arracacha B nepovirus	-
*Asparagus 3 potexvirus**	-
Beet curly top curtovirus	-
*Cassava green mottle nepovirus**	-

*Cassia mild mosaic carlavirus**	-
*Cherry leaf roll nepovirus**	-
*Eggplant mosaic tymovirus**	-
Eggplant mottled dwarf nucleorhabdovirus	-
*Henbane mosaic potyvirus**	-
*Melilotus mosaic potyvirus**	-
Papaya mosaic potexvirus	-
*Pelargonium line pattern carmovirus**	-
Pepino mosaic potexvirus	-
*Pepper veinal mottle potyvirus**	-
Potato 14R tobamovirus	-
Potato black ringspot nepovirus	-
Potato deforming mosaic begomovirus	-
Potato latent carlavirus	-
Potato mop-top furovirus	-
Potato P carlavirus	-
Potato rough dwarf carlavirus	-
Potato virus T trichovirus	-
Potato virus U nepovirus	-
Potato virus V potyvirus	-
Potato virus Y potyvirus [strains not in New Zealand]	-
Potato yellow dwarf nucleorhabdovirus	-
Potato yellow mosaic begomovirus	-
Potato yellow vein crinivirus	-
Potato yellowing alfamovirus	-
Solanum apical leaf curling begomovirus	-
Solanum yellows luteovirus	-
Southern potato latent carlavirus	-
Sowbane mosaic sobemovirus	-
*Tobacco etch potyvirus**	-
Tobacco necrosis necrovirus [strains not in New Zealand]	
*Tobacco necrotic dwarf luteovirus**	-
Tobacco rattle tobravirus [strains not in New Zealand]	-
Tobacco streak ilarvirus [strains not in New Zealand]	-
*Tobacco stunt varicosavirus**	-
*Tomato bushy stunt tombusvirus**	-
Tomato infectious chlorosis crinivirus	-
*Tomato leaf curl begomovirus - Australia**	-
Tomato leaf curl begomovirus - New Delhi	-
*Tomato top necrosis nepovirus**	-
Tomato yellow leaf curl begomovirus	-
Tomato yellow mosaic begomovirus	-
*Tomato yellow vein streak begomovirus**	-
Wild potato mosaic potyvirus	-

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).

Inspection and Testing Requirements for *Solanum tuberosum*

ORGANISM TYPES	ACCEPTABLE METHODS (See Note 6 at the end of this table).	Comments
Mites	Binocular microscope inspection.	
Fungi		
Aecidium cantensis	Growing season inspection in PEQ for symptom expression	
Phoma andigena var. *andina*	Growing season inspection in PEQ for symptom expression	
Phytophthora infestans (A2 mating strain)	Growing season inspection in PEQ for symptom expression	
Synchytrium endobioticum [official control]	Growing season inspection in PEQ for symptom expression	*S. endobioticum* cannot be cultured. It is identified by microscopic examination of affected plants. This organism belongs to the Myxomycetes in the Kingdom Protozoa.
Bacteria		
Clavibacter michiganensis subsp. *sepedonicus*	Growing season inspection in PEQ for symptom expression **AND** • Immunofluorescence **or** • ELISA **AND** grow plantlets on Murashige and Skoog medium (see note 18) **or** • PCR **AND** grow plantlets on Murashige and Skoog medium (see note 18)	
Dickeya chrysanthemi pv. *chrysanthemi*	Growing season inspection in PEQ for symptom expression **AND** plating on selective pectate media **or** PCR	
Dickeya chrysanthemi pv. *parthenii*	Growing season inspection in PEQ for symptom expression **AND** plating on selective pectate media **or** PCR	
Dickeya paradisiaca	Growing season inspection in PEQ for symptom expression **AND** plating on selective pectate media **or** PCR	
'Dickeya solani'	Growing season inspection in PEQ for symptom expression **AND** plating on selective pectate media **or** PCR	
Pectobacterium betavasculorum	Growing season inspection in PEQ for symptom expression **AND** plating on selective pectate media e.g. crystal violet pectate medium **or** PCR	
Xylella fastidiosa	PCR	
Viroid		
Potato spindle tuber viroid [transient]	PCR using two sets of primers **or** Return PAGE (with silver staining) **or** Hybridisation (P32 or digoxigenin labelled RNA probes)	
Viruses		
Arracacha B nepovirus	ELISA **or** PCR **AND** herbaceous indicators Ca	Sap transmitted with difficulty. ELISA must detect the oca strain
Andean potato latent tymovirus	ELISA **or** PCR **AND** herbaceous indicators Nb, No	
Andean potato mild mosaic tymovirus	PCR	

ORGANISM TYPES	ACCEPTABLE METHODS (See Note 6 at the end of this table).	Comments
Andean potato mottle comovirus	ELISA **or** PCR **AND** herbaceous indicators Nc, Nd	
Beet curly top curtovirus	ELISA or PCR	
Eggplant mottled dwarf nucleorhabdovirus	Herbaceous indicators Nb, Nc, Nd	
Papaya mosaic potexvirus	Herbaceous indicator Ca	
Pepino mosaic virus	Herbaceous indicators Nd, No, and Nt	
Potato 14R tobamovirus	Growing season inspection in PEQ for symptom expression	Not fully characterised.
Potato black ringspot nepovirus	ELISA **or** PCR **AND** herbaceous indicators Cq, No	
Potato deforming mosaic begomovirus	PCR **or** ELISA	
Potato latent carlavirus	PCR	
Potato mop-top furovirus	ELISA **or** PCR **AND** herbaceous indicators Ca, Cq, Nd	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	
Potato rough dwarf carlavirus	PCR	
Potato T trichovirus	ELISA **or** PCR **AND** Herbaceous indicators Ca**,** Cq	
Potato virus U nepovirus	Herbaceous indicators Ca, Cq	
Potato virus V potyvirus	ELISA **or** PCR	
Potato virus Y potyvirus [strains not in NZ]	ELISA **or** PCR **AND** herbaceous indicators Nb, No	
Potato yellow dwarf nucleorhabdovirus	Herbaceous indicators Nc	
Potato yellow mosaic begomovirus	Herbaceous indicators Nb, Nt	
Potato yellow vein crinivirus	PCR **or** hybridisation	
Potato yellowing alfamovirus	ELISA **or** PCR	
Solanum apical leaf curling begomovirus	Growing season inspection in PEQ for symptom expression	
Solanum yellows luteovirus	Growing season inspection in PEQ for symptom expression	
Southern potato latent carlavirus	Growing season inspection in PEQ for symptom expression	
Sowbane mosaic sobemovirus	Herbaceous indicators Cq, Ca	
Tobacco necrosis necrovirus [strains not in New Zealand]	Herbaceous indicators Ca, Cq, Nc	Tobacco necrosis virus A Tobacco necrosis virus B
Tobacco rattle tobravirus [strains not in New Zealand]	PCR **AND** herbaceous indicators Ca, Nc	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	Potato strain SB10 infects potato naturally.
Tomato infectious chlorosis crinivirus	PCR	
Tomato leaf curl begomovirus – New Delhi	Herbaceous indicators Nb	Potato leaf curl is a new disease in northern India caused by a strain of Tomato leaf curl new Delhi virus.
Tomato yellow leaf curl begomovirus	PCR **or** ELISA	

ORGANISM TYPES	ACCEPTABLE METHODS (See Note 6 at the end of this table).	Comments
Tomato yellow mosaic begomovirus	PCR **or** ELISA **AND** herbaceous indicators Nb, Nt	
Wild potato mosaic potyvirus	Herbaceous indicators Nc, No	
Phytoplasmas		
Eggplant little leaf phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato marginal flavescence	Nested or real-time PCR using universal phytoplasma primers	
Potato phyllody phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato purple-top roll phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato purple-top wilt phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato round leaf phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato stolbur phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato witches' broom phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
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.

ORGANISM TYPES	Comments
Columnea latent viroid*	No evidence that this viroid infects potato naturally.
Pepper chat fruit 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 *et al.*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.
Cherry leaf roll nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the herbaceous indicators Nc and Nt.
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.
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.
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 tombusvirus*	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. The unit for testing is defined in section 2.3.2.1.

2. Plantlets in growth medium must be de-flasked and grown in quarantine for the completion of pre-determined ~~testing virus disease~~ testing; however, the 'Inspection and Testing Requirements' may also require the plantlets to be grown on specific medium for bacteria testing. After plantlets are deflasked they must be grown in sterile potting mix. Testing must be carried out on plants while they are still in active growth prior to tuber formation.
3. Herbaceous indicator hosts (**Cq** - *Chenopodium quinoa*, **Nd** – *Nicotiana denneyii*, **No –** *Nicotiana occidentalis* P1 and **Nt** - *Nicotiana tabacum* (cv White Burley)): at least two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator hosts (**Ca** - *Chenopodium amaranticolour*, **Nb** - *Nicotiana benthamiana* and **Nc** - *Nicotiana clevelandii*: at least four plants of each herbaceous indicator species must be used in each test.
4. For herbaceous indexing 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). For the PSTVd PCR young actively growing leaf tissue must be used.
5. 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. A suitable positive control must be included.
6. 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.
7. All PCR, hybridisation 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.
8. Inspect *Solanum tuberosum* plants for signs of pest and disease at least once per week. Inspect inoculated herbaceous indicator plants at least twice per week for symptoms of virus infection
9. With prior notification, MPI will accept other internationally recognised testing methods.

Declaration Form

To be completed and signed by the exporter and importer.

As defined by the New Zealand HSNO Act 1996, Genetically modified organism means, unless expressly provided otherwise by regulations, any organism in which any of the genes or any other genetic material (a) have been modified by in vitro techniques; or (b) 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.

Note that under the Hazardous Substances and New Organisms (HSNO) Act 1996. The import and release of any genetically modified crop without approval from the Environmental Protection Authority (EPA) it is unlawful.

I,……..(*exporter's name and address*)……..declare that according to the requirements set out in the Nursery Stock Import Health Standard (MPI Import Health Standard: 155.02.06: Importation of Nursery Stock - http://www.mpi.govt.nz/document-vault/1152), (*species name and lot/line number or unique identifier as stated on all the other import documentation*) was produced neither "from" nor "by" genetically modified crops.

I undertake to inform immediately the importer and the Ministry for Primary Industries, MPI, New Zealand of any information that can undermine the accuracy of this declaration.

Note that MPI may request evidence as to how production, handling and transport of these seeds is performed in the field, or require and audit as a way to provide quality to the production system.

I,…… (*importer's name and address*)……..declare to the best of my knowledge that according to the requirements set out in the Nursery Stock Import Health Standard (MPI Import Health Standard: 155.02.06: Importation of Nursery Stock - http://www.mpi.govt.nz/document-vault/1152), (*species name and lot/line number or unique identifier as stated on all the other import documentation*) was produced neither "from" nor "by" genetically modified crops.

Signed by (*exporter*) and Company Name and details

(*print name*)

Date

Signed by (*importer)* and Company Name and details

(*print name*)

Warning: Any person who knowingly makes a statement of information or a declaration that is false or misleading in a material particular may on summary conviction, be sentenced to a term of imprisonment and/or fined not exceeding $500,000.00

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:

Approved 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

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Additional declaration: "Aster yellows phytoplasma is not known to occur in __ (the country or state where the plants were grown) __".

B. For Tissue Cultures:

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Additional Declaration: "The cultures have been derived from parent stock tested or inspected and found free of Aster yellows 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 *Syringa*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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".

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:

Approved 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 *Tricyrtis*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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

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:

Approved 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 <u>other than</u> 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.

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 for Primary Industries (MPI) 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 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 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.

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 MPI 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 for Primary Industries (MPI) 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 for Primary Industries (MPI) 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* 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* 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 3B

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
Bacterium	
Corynebacteriaceae	
Curtobacterium flaccumfaciens pv. *oortii*	yellow pock
Virus	

Cymbidium ringspot virus	-
Tobacco rattle virus [strains not in New Zealand]	-
Tomato bushy stunt virus	-
Tomato ringspot virus	-
Tulip grey virus (syn. *Tulip severe mosaic virus*)	-
Tulip halo necrosis virus	-
Tulip mild mosaic virus	-
Tulip mild mottle mosaic virus	-
Wa tulip 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:

Approved Countries: All

Quarantine Pests: *Ceratocystis fimbriata;* Elm mosaic virus, Elm phloem necrosis; *Phellinus noxius; Phytophthora ramorum; Xylella fastidiosa*

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

A. For Whole Plants:

PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

d. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Ulmus parvifolia*

B. For Tissue Cultures:

PEQ: Level 3B
Minimum Period: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

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 MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. The operator of the accredited facility must also have an agreement with MPI 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 MPI 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 MPI and the [name of the MPI-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 MPI and the [name of the MPI-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 greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

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 MPI 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 3B greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

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 borealis	aphid
Illinoia pepperi	blueberry aphid
Cicadellidae	
Euscelis striatulus	Blunt-nosed leafhopper
Scaphytopius magdalensis	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	leaftier
Cheimophila salicella	European carnation tortrix
Choristoneura hebenstreitella	tortricid
Choristoneura rosaceana	oblique-banded leafroller
Cydia packardi	cherry fruitworm

Dichomeris vacciniella	leaftier
Hendecaneura shawiana	blueberry tip borer
Spilonota ocellana	eyespotted bud moth
Thysanoptera	
Thripidae	
Catinathrips similis	thrips
Catinathrips vaccinicola	thrips
Frankliniella bispinosa	flower thrips
Frankliniella tritici	eastern flower thrips
Frankliniella vaccinii	blueberry thrips
Scirtothrips ruthveni	-
Taeniothrips vaccinophilus	thrips
Mite	
Arachnida	
Acarina	
Eriophyidae	
Acalitus vaccinii	blueberry bud mite
Fungus	
Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe vaccinii (anamorph *Phomopsis vaccinii*)	twig blight
Dothideales	
Botryosphaeriaceae	
Botryosphaeria corticis	cane blight
Botryosphaeria vaccinii (anamorph *Phyllosticta elongata*)	--
Polystomellaceae	
Dothidella vacciniicola	twig canker
Erysiphales	
Erysiphaceae	
Microsphaera vaccinii	powdery mildew
Hypocreales	
Hypocreaceae	
Calonectria ilicicola (anamorph *Cylindrocladium crotalariae*)	root and stem rot
Leotiales	
Leotiaceae	
Godronia cassandrae (anamorph *Fusicoccum putrefaciens*)	foliage spot
Godronia cassandrae f. sp. *vaccinii*	cane canker
Sclerotiniaceae	
Monilinia baccarum	mummy berry
Monilinia fructigena (anamorph *Monilia fructigena*)	European brown rot
Monilinia ledi	twig blight
Monilinia megalospora	-
Monilinia oxycocci	-
Monilinia urnula	brown rot
Monilinia vaccinii-corymbosi	brown rot
Phyllachorales	
Phyllachoraceae	
Ophiodothella vaccinii	fly speck leaf spot
Meliolales	
Meliolaceae	
Asteridiella exilis	black mildew
Rhytismatales	
Rhytismataceae	
Lophodermium hypophyllum	-
Lophodermium maculare	leaf spot
Rhytisma vaccinii	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
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora ramorum	sudden oak death disease
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
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	
Moniliaceae	
Gloeocercospora inconspicua	leaf spot
Ramularia vaccinii	leaf spot
unknown Hyphomycetes	
unknown Hyphomycetes	
Aureobasidium vaccinii	twig and leaf blight
Bacterium	
Pseudomonadaceae	
Xylella fastidiosa	Pierce's disease
Rhizobiaceae	
Agrobacterium rubi	cane gall
Virus	
Blueberry leaf mottle virus	-
Bluberry 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	-
Phytoplasma	
Blueberry stunt phytoplasma	-
Cranberry false blossom phytoplasma	-
Vaccinium witches' broom phytoplasma	-
Disease of unknown aetiology	
Blueberry fruit drop disease	-

Inspection, Testing and Treatment Requirements for *Vaccinium*

ORGANISM TYPES	**MPI-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	
Agrobacterium rubi	Growing season inspection in PEQ for disease symptom expression.
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Virus	
Blueberry leaf mottle virus	Herbaceous indicators Cq and Nc AND ELISA or PCR
Bluberry red ringspot virus (syn. *Cranberry ringspot virus*)	ELISA or PCR
Blueberry scorch virus	Herbaceous indicator Cq AND ELISA or PCR
Blueberry shock virus	Herbaceous indicators Nc and Nt AND ELISA or PCR
Blueberry shoestring virus	ELISA or PCR
Peach rosette mosaic virus	Herbaceous indicators Cq and Nt AND ELISA or PCR
Tobacco streak virus [strains not in New Zealand]	Herbaceous indicators Cq and Nt AND ELISA or PCR
Tomato ringspot virus	Herbaceous indicators Cq and Nt AND ELISA or PCR
Phytoplasmas	
Blueberry stunt phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers.
Cranberry false blossom phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers.
Vaccinium witches' broom phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers.
Disease of unknown aetiology	
Blue berry fruit drop disease	Growing season inspection in PEQ for disease symptom expression.

Notes:

1. The unit for testing isdefined in section 2.3.2.1.
2. 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.
3. Virus testing (herbaceous indexing, ELISA and PCR) must be carried out in the spring or under spring-like conditions using the new flush of growth. Bacteria and phytoplasma testing (PCR) must be carried out at the end of the summer or under summer-like conditions.
4. Vaccinium plants must 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.
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, MPI will accept other internationally recognised testing methods.

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.

- **Type of *Vaccinium macrocarpon* nursery stock approved for entry into New Zealand**

Cuttings (dormant); Plants in tissue culture

- **Pests of *Vaccinium macrocarpon***

Refer to the pest list.

- **Entry conditions for:**

3.1 *Vaccinium macrocarpon* cuttings and tissue culture from offshore MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. The operator of the accredited facility must also have an agreement with MPI 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 MPI 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 MPI and the [name of the MPI-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 MPI and the [name of the MPI-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 greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

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 MPI 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 3B greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

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 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	
Acronicta 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	leaftier
Choristoneura hebenstreitella	tortricid
Choristoneura rosaceana	oblique-banded leafroller
Dichomeris vacciniella	leaftier
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	
Botryosphaeria vaccinii (anamorph *Phyllosticta*	--

elongata)	
Erysiphales	
Erysiphaceae	
Microsphaera vaccinii	powdery mildew
Leotiales	
Leotiaceae	
Godronia cassandrae (anamorph *Fusicoccum putrefaciens*)	foliage spot
Godronia cassandrae f. sp. *vaccinii*	cane canker
Sclerotiniaceae	
Monilinia fructigena (anamorph *Monilia fructigena*)	European brown rot
Monilinia oxycocci	-
Rhytismatales	
Rhytismataceae	
Lophodermium hypophyllum	-
Lophodermium maculare	leaf spot
Lophodermium oxycocci	-
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)	armillaria root rot
Basidiomycota: Teliomycetes	
Uredinales	
Pucciniastraceae	
Pucciniastrum goeppertianum	rust
Chytridiomycota	
Chytridiales	
Synchytriaceae	
Synchytrium vaccinii	red leaf gall
Mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Coniothyrium vaccinicola	brand canker
Phoma vaccinii	stem blight
Septoria vaccinii	septoria spot
Strasseria oxycocci	fruit rot
unknown Coelomycetes	
unknown Coelomycetes	
Gloeosporium minus	leaf spot and stem canker
Leptothyrium conspicuum	fly speck
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora ramorum	Sudden Oak Death disease
Bacterium	
Pseudomonadaceae	
Xylella fastidiosa	
Rhizobiaceae	
Agrobacterium rubi	cane gall
Virus	
Blueberry scorch virus	
Bluberry red ringspot virus (syn. *Cranberry ringspot virus*)	-
Tobacco streak virus [strains not in New Zealand]	-
Phytoplasma	
Cranberry false blossom phytoplasma	-

Inspection, Testing and Treatment Requirements for *Vaccinium macrocarpon*

ORGANISM TYPES	**MPI-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	
Agrobacterium rubi	Growing season inspection in PEQ for disease symptom expression.
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Virus	
Blueberry scorch virus	Herbaceous indicator Cq AND ELISA or PCR.
Blueberry red ringspot virus (syn. *Cranberry ringspot virus*)	ELISA or PCR.
Tobacco streak virus [strains not in New Zealand]	Herbaceous indicators Cq and Nt AND ELISA or PCR.
Phytoplasmas	
Cranberry false blossom phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers.

Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. 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.
3. Virus testing (herbaceous indexing, ELISA and PCR) must be carried out in the spring or under spring-like conditions using the new flush of growth. Bacteria and phytoplasma testing (PCR) must be carried out at the end of the summer or under summer-like conditions.
4. Vaccinium plants must 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.
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, MPI will accept other internationally recognised testing methods.

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:

Approved Countries: All

Quarantine Pests: *Tetranychus kanzawai;* 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

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for Uredinales: Additional declaration: "Rust diseases are not known to occur on _ (the imported genus) _ in _ (the country in which the plants were grown) _".

c. Conditions for *Tetranychus kanzawai:* 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:

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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:

Approved 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:
PEQ: Level 2
Minimum Period: 3 months
1. 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) _____".
2. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

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 V*itis*", 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 MPI-accredited facilities, or into Level 3B 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 cultures from offshore MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Vitis*, the accredited facility operator must also have an agreement with MPI 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 MPI 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 MPI and the [name of the MPI-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 MPI and the [name of the MPI-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

- sourced from mother plants which are at least 10 year old and have been inspected during the growing season and are free from symptoms of Syrah decline.

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 greenhouse facility (or Level 3B greenhouse facility at the direction of the CTO) accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ)*."*

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 in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. The minimum quarantine period will be:

- 6 months for plants in tissue culture and cuttings sourced from mother plants that have been kept in insect-proof plant houses (which may be extended to a minimum of 16 months at the direction of the CTO); or
- 16 months (which may be reduced to a minimum of 9 months at the discretion of the CTO) for cuttings sourced directly from open ground mother plants.

  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 MPI 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 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 of the phytosanitary certificate and by providing the following additional declarations to the phytosanitary certificate:

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

- sourced from mother plants which are at least 10 year old and have been inspected during the growing season and are free from symptoms of Syrah decline.

(iv) *Post-entry quarantine*

PEQ: All *Vitis* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

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 active growth 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	
Amphicerus bicaudatus	apple twig borer
Amphicerus bimaculatus	bostrichid beetle
Amphicerus cornutus	-
Apate congener	-
Apate monachus	black borer
Bostrychopsis jesuita	large auger beetle
Dexicrates robustus	-
Melalgus confertus	branch and twig borer
Micrapate scabrata	-
Neoterius mistax	-
Psoa quadrisignata	-
Schistocerus bimaculatus	grape cane borer
Scobicia declivis	lead cable borer
Xylopertha retusa	wood boring beetle
Xylopsocus gibbicollis	-
Buprestidae	
Agrilus marginicollis	flatheaded grape borer
Carabidae	
Adoxus obscurus [Animals Biosecurity]	-
Cerambycidae	
Acalolepta vastator	-
Cerasphorus albofasciatus	grape trunk borer
Chrysomelidae	
Altica chalybaea	grape flea beetle
Altica torquata	grapevine flea beetle
Bromius obscurus	western grape rootworm
Fidia viticida	grape root worm
Glyptoscelis squamulata	grape bud beetle
Haltica spp.	-
Monolepta australis	red-shouldered leaf beetle
Coccinellidae	
Coccinella transversoguttata [Animals Biosecurity]	-
Midas pygmaeus [Animals Biosecurity]	-
Nephus reunioni [Animals Biosecurity]	-
Rhyzobius ruficollis [Animals Biosecurity]	-
Stethorus spp. [Animals Biosecurity]	-
Curculionidae	
Bustomus setulosus	brown weevil
Craponius inaequalis	grape curculio
Dischista cincna	flower beetle
Eremnus atratus	black weevil
Eremnus cerealis	western province grain worm
Eremnus setulosus	grey weevil
Naupactus xanthographus	fruit tree weevil
Orthorhinus cylindrirostris	elephant weevil
Orthorhinus klugi	immigrant acacia weevil
Otiorhynchus cribricollis	cribrate weevil
Perperus spp.	apple root weevils
Platyaspistes glaucus	-
Platyaspistes venustus	-
Rhigopsis effracta	-
Tanyrhynchus carinatus	bud nibbler

Elateridae	
Limonius canus	Pacific Coast wireworm
Meloidae	
Mylabris oculata	-
Scarabaeidae	
Athlia rustica	-
Cotalpa ursina	-
Hoplia callipyge	-
Hoplia pubicollis	-
Macrodactylus subspinosus	rose chafer
Pachnoda sinuata	scarab beetle
Popillia japonica	Japanese beetle
Schizonycha sp.	cockchafer
Scolytidae	
Scolytus japonicus	Japanese bark beetle
Xyleborus dispar	ambrosia beetle
Xyleborus semiopacus	black twig borer
Staphylinidae	
Oligota pygmaea [Animals Biosecurity]	-
Tenebrionidae	
Blapstinus sp.	darkling beetle
Coniontis parviceps	-
Metoponium abnorme	-
Diptera	
Cecidomyiidae	
Diadiplosis koebelei	-
Tachinidae	
Ollacheryphe aenea [Animals Biosecurity]	-
Sturmia harrisinae [Animals Biosecurity]	-
Voriella uniseta [Animals Biosecurity]	-
Hemiptera	
Anthocoridae	
Orius sp. [Animals Biosecurity]	-
Coreidae	
Anthocoris sp.	-
Mictis profana	crusader bug
Lygaeidae	
Nysius raphanus	false chinch bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus	coon bug
Miridae	
Creontiades dilutus	green mirid
Pentatomidae	
Euschistus conspersus	stink bug
Oechalia schellenbergi [Animals Biosecurity]	Schellenberg's soldier bug
Pyrrhocoridae	
Dindymus versicolor	harlequin bug
Homoptera	
Aleyrodidae	
Aleurocanthus woglumi	citrus blackfly
Tetraleurodes vittatus	-
Trialeurodes vittata	grape whitefly
Aphididae	
Aphis illinoisensis	grapevine aphid
Aphis medicaginis	-
Asterolecaniidae	
Asterolecanium pustulans	oleander pit scale
Cerococcidae	
Asterococcus muratae	pit scale
Cicadellidae	
Acia lineatifrons	leafhopper
Carneocephala fulgida	red-headed sharpshooter

Carneocephala fulgida [vector]	red-headed sharpshooter
Dikrella cockerellii	blackberry leafhopper
Draeculacephala minerva	green sharpshooter
Draeculacephala minerva [vector]	green sharpshooter
Empoasca sp.	green leafhopper
Erythroneura comes	eastern grape leafhopper
Erythroneura elegantula	western grape leafhopper
Erythroneura variabilis	variegated grape leafhopper
Erythroneura ziczac	-
Graphocephala atropunctata	leafhopper
Graphocephala atropunctata [vector]	blue-green sharpshooter
Hordnia circellata	-
Scaphoideus titanus [vector]	raspberry leafhopper
Cicadidae	
Platypedia minor	-
Tettigades chilensis	-
Coccidae	
Ceroplastes rusci	fig wax scale
Eulecanium cerasorum	calico scale
Eulecanium pruinosum	frosted scale
Heliococcus bohemicus	scale
Parthenolecanium persicae	European peach scale
Pulvinaria betulae	scale
Pulvinaria innumerabilis	cottony maple scale
Pulvinaria vitis	woolly vine scale
Diaspididae	
Aonidiella inornata	inornate scale
Chrysomphalus aonidum	Florida red scale
Diaspidiotus uvae	grape scale
Oceanspidiotus spinosus	armoured scale
Parlatoria cinerea	chaff scale
Parlatoria oleae	olive scale
Pinnaspis strachani	hibiscus snow scale
Pseudaonidia trilobitiformis	trilobite scale
Pseudaulacaspis pentagona	white peach scale
Quadraspidiotus juglansregiae	walnut scale
Selenaspidus articulatus	West Indian red scale
Margarodidae	
Eurhizococcus brasiliensis	margarodid
Icerya seychellarum	Seychelles scale
Margarodes capensis	Seychelles fluted scale
Margarodes greeni	soft scale
Margarodes meridionalis	-
Margarodes prieskaensis	margarodid
Margarodes trimeni	margarodid
Margarodes vitis	-
Margarodes vredendalensis	margarodid
Membracidae	
Ceresa bubalus	tree hopper
Spissistilus bisonia	-
Spissistilus festinus	three-cornered alfalfa hopper
Phylloxeridae	
Viteus vitifoliae [strain]	grape phylloxera
Pseudococcidae	
Maconellicoccus hirsutus	pink hibiscus mealybug
Planococcus ficus	fig mealybug
Pseudococcus capensis	-
Pseudococcus maritimus	grape mealybug
Rhizoecus kondonis	Kondo mealybug
Hymenoptera	
Aphelinidae	
Coccophagus caridei [Animals Biosecurity]	-

Coccophagus gurneyi [Animals Biosecurity]	-
Bethylidae	
Goniozus platynota [Animals Biosecurity]	-
Braconidae	
Apanteles harrisinae [Animals Biosecurity]	-
Bracon cushmani [Animals Biosecurity]	-
Dolichogenidea tasmanica [Animals Biosecurity]	-
Dryinidae	
Aphelopus albopictus [Animals Biosecurity]	-
Encyrtidae	
Acerophagus notativentris [Animals Biosecurity]	-
Anagyrus clauseni [Animals Biosecurity]	-
Anagyrus fusciventris [Animals Biosecurity]	-
Anagyrus pseudococci [Animals Biosecurity]	-
Leptomastix dactylopii [Animals Biosecurity]	parasitic wasp
Metaphycus flavus [Animals Biosecurity]	-
Pseudaphycus angelicus [Animals Biosecurity]	-
Zarhopalus corvinus [Animals Biosecurity]	-
Eulophidae	
Colpoclypeus florus [Animals Biosecurity]	-
Formicidae	
Anoplolepis steingroeveri [Animals Biosecurity]	black ant
Crematogaster peringueyi [Animals Biosecurity]	cocktail ant
Formica cinerea [Animals Biosecurity]	ant
Pogonomyrmex californica [Animals Biosecurity]	California harvester ant
Solenopsis xyloni [Animals Biosecurity]	southern fire ant
Veromessor pergandei [Animals Biosecurity]	desert seed-harvester ant
Ichneumonidae	
Campoplex capitator [Animals Biosecurity]	-
Dicaelotus inflexus [Animals Biosecurity]	-
Mymaridae	
Anagrus epos [Animals Biosecurity]	-
Pteromalidae	
Ophelosia charlesii [Animals Biosecurity]	-
Pachyneuron sp. [Animals Biosecurity]	-
Trichogrammatidae	
Trichogramma funiculatum [Animals Biosecurity]	-
Trichogrammatomyia tortricis [Animals Biosecurity]	-
Vespidae	
Polistes buysoni [Animals Biosecurity]	-
Isoptera	
Kalotermitidae	
Cryptotermes brevis	West Indian drywood termite
Kalotermes flavicollis	termite
Kalotermes minor	-
Neotermes chilensis	termite
Rhinotermitidae	
Coptotermes acinaciformis [official control]	Australian subterranean termite
Reticulitermes hesperus	-
Termopsidae	
Porotermes quadricollis	-
Lepidoptera	
Agaristidae	
Agarista agricola	painted vine moth
Heraclia superba	grapevine zebra moth
Arctiidae	
Estigmene acrea	saltmarsh caterpillar
Hyphantria cunea	fall webworm
Laora variabilis	-
Spilosoma virginica	yellow woollybear
Turuptiana obliqua	tiger moth
Cossidae	

Coryphodema tristis	quince trunk borer
Zeuzera coffeae	red coffee borer
Heliozelidae	
Antispila rivillei	-
Noctuidae	
Achaea spp.	fruit-piercing moths
Agrotis munda	brown cutworm
Alabama argillacea	cotton leafworm
Anomis mesogona	hibiscus looper
Anomis spp.	-
Calyptra spp.	fruit-piercing moths
Copitarsia consueta	noctuid moth
Eudocima spp.	fruit-piercing moths
Euxoa messoria	darksided cutworm
Euxoa ochrogaster	redbacked cutworm
Helicoverpa punctigera	oriental tobacco budworm
Mythimna sp.	-
Noctua fimbriata	broad-bordered yellow underwing
Noctua pronuba	large yellow underwing
Oraesia spp.	fruit-piercing moths
Orthodes rufula	cutworm
Peridroma margaritosa	-
Peridroma saucia	variegated cutworm
Protorthodes rufula	-
Serrodes spp.	fruit-piercing moth
Sphingomorpha spp.	-
Spodoptera littoralis	cotton leafworm
Xestia c-nigrum	spotted cutworm
Oecophoridae	
Echiomima sp.	-
Maroga melanostigma	fruit tree borer
Psychidae	
Gymnelema plebigena	bagworm
Pterophoridae	
Geina periscelidactylus	-
Pyralidae	
Desmia funeralis	grape leaf-folder
Euzophera bigella	quince moth
Ostrinia nubilalis	European corn borer
Saturniidae	
Hemileuca eglanterina	brown day-moth
Hyalophora cecropia	cecropia moth
Sesiidae	
Vitacea polistiformis	grape root borer
Sphingidae	
Eumorpha achemon	achemon sphinx
Hippotion celerio	grapevine hawk moth
Hyles euphorbiae	spurge hawk moth
Hyles lineata	whitelined sphinx
Theretra capensis	grapevine hawk moth
Theretra oldenlandiae	vine hawk moth
Tortricidae	
Archips argyrospilus	fruit tree leafroller
Argyrotaenia citrana	orange tortrix
Argyrotaenia ljungiana	grey red-barred tortrix
Argyrotaenia velutinana	red-banded leafroller
Cryptophlebia leucotreta	false codling moth
Endopiza viteana	-
Eulia stalactitis	-
Eupoecilia ambiguella	vine moth
Lobesia botrana	grape berry moth
Paralobesia viteana	grape berry moth

Platynota stultana	omnivorous leafroller
Proeulia auraria	grapevine leafroller
Proeulia triqueta	-
Zygaenidae	
Harrisina americana	grapeleaf skeletonizer
Harrisina brillians	western grapeleaf skeletonizer
Theresimima ampelophaga	zygaenid butterfly
Neuroptera	
Chrysopidae	
Chrysopa oculata [Animals Biosecurity]	-
Chrysopa spp. [Animals Biosecurity]	-
Coniopterygidae	
Cryptoscenea australiensis [Animals Biosecurity]	-
Hemerobiidae	
Micromus sp. [Animals Biosecurity]	-
Orthoptera	
Acrididae	
Melanoplus femurrubrum	red-legged grasshopper
Melanoplus mexicanus devastator	-
Oedaleonotus enigma	-
Phaulacridium vittatum	wingless grasshopper
Schistocerca cancellata	-
Schistocerca shoshone	-
Schistocerca vaga	-
Gryllidae	
Acheta fulvipennis	cricket
Microgryllus pallipes	cricket
Tettigoniidae	
Caedicia spp.	-
Plangia graminea	grasshopper
Thysanoptera	
Phlaeothripidae	
Haplothrips victoriensis	tubular black thrips
Thripidae	
Caliothrips fasciatus	bean thrip
Drepanothrips reuteri	grape thrips
Frankliniella cestrum	tomato thrips
Frankliniella minuta	minute flower thrips
Frankliniella occidentalis [pesticide resistant strain]	western flower thrips
Heliothrips sylvanus	thrips
Rhipiphorothrips cruentatus	leaf thrips
Scirtothrips citri	citrus thrips
Scolothrips sexmaculatus [Animals Biosecurity]	-
Unknown Insecta	
Unknown Insecta	
Cryptolarynx vitis	-
Dyctineis pulvinosus	-

Mite	
Arachnida	
Acarina	
Anystidae	
Anystis agilis [Animals Biosecurity]	-
Eriophyidae	
Colomerus vitis [leaf curling strain]	grape erineum mite
Phyllocoptes vitis	eriophyid mite
Phytoseiidae	
Amblyseius victoriensis [Animals Biosecurity]	-
Metaseiulus occidentalis [Animals Biosecurity]	-
Neoseiulus chilenensis [Animals Biosecurity]	predator mite
Typhlodromus doreenae [Animals Biosecurity]	-
Tenuipalpidae	

Brevipalpus chilensis	false spider mite
Brevipalpus lewisi	bunch mite
Brevipalpus lilium	false spider mite
Brevipalpus obovatus	privet mite
Tenuipalpus granati	false spider mite
Tetranychidae	
Eotetranychus carpini	tetranychid mite
Eotetranychus pruni	hickory scorch mite
Eotetranychus smithi	tetranychid mite
Eotetranychus viticola	tetranychid mite
Eotetranychus willamettei	hazel mite
Eotetranychus yumensis	Yumi spider mite
Eutetranychus orientalis	pear leaf blister mite
Oligonychus coffeae	tea red spider mite
Oligonychus mangiferus	mango spider mite
Oligonychus peruvianus	spider mite
Oligonychus punicae	avocado brown mite
Oligonychus yothersi	avocado red mite
Tetranychus kanzawai	kanzawa mite
Tetranychus mcdanieli	McDaniel spider mite
Tetranychus pacificus	Pacific spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
Cernuella virgata	small banded snails
Cochlicella barbara	small pointed garden snail
Theba pisana	white Italian snail
Fungus	
Ascomycota	
Caliciales	
Unknown Caliciales	
Roesleria pallida	grape root rot
Diaporthales	
Valsaceae	
Diaporthe rudis (anamorph *Phomopsis rudis*)	phomopsis canker
Dothideales	
Mycosphaerellaceae	
Guignardia bidwellii (anamorph *Phyllosticta ampelicida*)	black rot
Guignardia bidwellii f. sp. *euvitis*	-
Guignardia bidwellii f. sp. *muscadinii*	-
Mycosphaerella angulata (anamorph *Cercospora brachypus*)	angular leaf spot
Schizothyriaceae	
Schizothyrium pomi (anamorph *Zygophiala jamaicensis*)	fly speck
Hypocreales	
Hypocreaceae	
Cylindrocarpon destructans var. *crassum*	root rot
Leotiales	
Dermateaceae	
Pseudopezicula tetraspora	angular leaf scorch
Pseudopezicula tracheiphila	rotbrenner
Sclerotiniaceae	
Grovesinia pyramidalis (anamorph *Cristulariella moricola*)	target spot
Rhytismatales	
Rhytismataceae	
Rhytisma vitis	tar spot
Saccharomycetales	

Saccharomycetaceae	
Pichia membranaefaciens	-
Unknown Ascomycota	
Hyponectriaceae	
Physalospora baccae	-
Xylariales	
Xylariaceae	
Anthostomella pullulans	Brulure
Basidiomycota: Agaricomycetes	
Hymenochaetales	
Hymenochaetaceae	
Phellinus noxius	brown root rot
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)	armillaria root rot
Armillaria sp.	armillaria root rot
Armillaria tabescens	armillaria root rot
Ganodermatales	
Ganodermataceae	
Ganoderma lucidum (anamorph *Polyporus lucidus*)	wood rot
Ganoderma tsugae	-
Poriales	
Coriolaceae	
Bjerkandera adusta	white rot
Bjerkandera fumosa	--
Lentinaceae	
Pleurotus ostreatus	wood decay
Stereales	
Stereaceae	
Stereum sp.	-
Basidiomycota: Teliomycetes	
Uredinales	
Unknown Uredinales	
Physopella ampelopsidis	grape rust
Mitosporic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
Phacellium sp.	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
Ascochyta ampelina	leaf spot
Coniella diplodiella	white rot
Coniella petrakii	white rot
Phomopsis longiparaphysata	phomopsis rot
Pyrenochaeta vitis	leaf spot
Septoria ampelina	septoria leaf spot
Unknown Coelomycetes	
Unknown Coelomycetes	
Nattrassia toruloidea	leaf spot
Pestalotia menezesiana	fruit rot
Pestalotia pezizoides	fruit and leaf spot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis uvicola	fruit rot
Mitosporic Fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
Alternaria vitis	leaf disease
Phaeoramularia dissiliens	cercospora leaf spot
Moniliaceae	

Cephalosporium sp.	--
Penicillium aurantiogriseum	penicillium rot
Verticillium heterocladum	-
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Briosia ampelophaga	leaf blotch
Candida krusei	yeasty rot
Candida steatolytica [Animals Biosecurity]	-
Oidium sp.	powdery mildew
Paecilomyces farinosus	-
Paecilomyces spp.	-
Phaeoacremonium aleophilum	-
Phaeoisariopsis sp.	-
Stigmina vitis	leaf fall
Bacterium	
Pseudomonadaceae	
Xanthomonas campestris pv. *viticola*	bacterial canker
Xylella fastidiosa	Pierce's disease
Xylophilus ampelinus	bacterial blight
Rhizobiaceae	
Agrobacterium rubi	cane gall
Virus	
Artichoke Italian latent virus	-
Cherry leaf roll virus [strains not in New Zealand]	-
Grapevine Ajinashika disease virus	-
Grapevine Algerian latent virus	-
Grapevine Anatolian ringspot virus	-
Grapevine angular mosaic virus	-
Grapevine berry inner necrosis virus	-
Grapevine Bulgarian latent virus	-
Grapevine chrome mosaic virus	-
Grapevine deformation virus	-
Grapevine fanleaf virus [strains not in New Zealand]	-
Grapevine labile rod-shaped virus	-
Grapevine leafroll-associated virus [type 7]	-
Grapevine line pattern virus	-
Grapevine pinot gris virus	-
Grapevine red blotch-associated virus	-
Grapevine stunt virus	-
Grapevine Tunisian ringspot virus	-
Grapevine virus D	-
Peach rosette mosaic virus	-
Petunia asteroid mosaic virus	-
Raspberry ringspot virus	-
Sowbane mosaic virus	-
Strawberry latent ringspot virus [strains not in New Zealand]	-
Tomato ringspot virus	-
Viroid	
Australian grapevine viroid	-
Grapevine yellow speckle viroid 2	-
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) -

Diseases of unknown aetiology

Grapevine vein clearing -
LN33 stem grooving -
Syrah decline -

Inspection, Testing and Treatment Requirements for *Vitis*

ORGANISM TYPES	**MPI-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	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility. 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	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility.
Agrobacterium rubi	Growing season inspection in PEQ for disease symptom expression AND Hot water treatment (Refer to "Approved Treatments for *Vitis*")
Xanthomonas campestris pv. viticola	Growing season inspection in PEQ for disease symptom expression AND Hot water treatment (Refer to "Approved Treatments for *Vitis*")
Xilophilus ampelinus	Growing season inspection in PEQ for disease symptom expression AND Hot water treatment (Refer to "Approved Treatments for *Vitis*")
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR (two sets, samples to be collected at least four weeks apart) AND Hot water treatment (Refer to "Approved Treatments for *Vitis*")
Virus	
Artichoke Italian latent virus	Growing season inspection in PEQ for disease symptom expression
Cherry leaf roll virus [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
Grapevine Ajinashika disease virus	Growing season inspection in PEQ for disease symptom expression
Grapevine Algerian latent virus	Growing season inspection in PEQ for disease symptom expression
Grapevine Anatolian ringspot virus	Growing season inspection in PEQ for disease symptom expression
Grapevine angular mosaic virus	Growing season inspection in PEQ for disease symptom expression
Grapevine berry inner necrosis virus	Growing season inspection in PEQ for disease symptom expression
Grapevine Bulgarian latent virus	Herbaceous indicators (Ca and Cq)
Grapevine chrome mosaic virus	Herbaceous indicators (Ca, Cq, Cs and Nt)
Grapevine deformation virus	Herbaceous indicators (Ca and Cq)
Grapevine fanleaf virus [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators (Ca, Cq, and Cs)
Grapevine labile rod-shaped virus	Growing season inspection in PEQ for disease symptom expression
Grapevine leafroll-associated virus [type 7]	PCR
Grapevine line pattern virus	Growing season inspection in PEQ for disease symptom expression
Grapevine pinot gris virus	PCR
Grapevine red blotch-associated virus	PCR
Grapevine stunt virus	Growing season inspection in PEQ for disease symptom expression
Grapevine Tunisian ringspot virus	Growing season inspection in PEQ for disease symptom expression
Grapevine virus D	PCR
Peach rosette mosaic virus	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
Petunia asteroid mosaic virus	PCR or ELISA
Raspberry ringspot virus	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
Sowbane mosaic virus	Herbaceous indicators (Ca and Cq)

Strawberry latent ringspot virus [strains not in New Zealand]	PCR AND herbaceous indicators (Ca, Cq and Cs)
Tomato ringspot virus	ELISA or PCR AND herbaceous indicators (Ca and Cq)
Viroids	Growing season inspection in PEQ for disease symptom expression
Phytoplasmas	**Plants derived from cuttings:** Nested PCR or real-time PCR using universal phytoplasma primers AND Hot water treatment (Refer to "Approved Treatments for *Vitis*") **Plants derived from tissue cultures:** Nested PCR or real-time PCR using universal phytoplasma primers (two sets, samples to be collected at least four weeks apart)
Disease of unknown aetiology	
Grapevine vein clearing	Growing season inspection in PEQ for disease symptom expression
LN33 stem grooving	Woody indexing or green indexing (LN33)
Syrah decline	Additional declaration endorsed on the phytosanitary certificate, refer to section 3.1 (iii) for offshore MPI-accredited facilities or 3.2 (iii) for non-accredited facilities.

Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. Herbaceous indicator hosts (**Ca** - *Chenopodium amaranticolor*, **Cq** - *Chenopodium quinoa*, **Cs** - *Cucumis sativus* and **Nt** - *Nicotiana tabacum)*: 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 or green indexing: at least two plants of each woody/green indicator must be used in each test. All woody indicators are to be inoculated by double budding while green indicators are top grafted. A suitable positive control must be included.
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, MPI will accept other internationally recognised testing methods.

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 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 *Wollemia nobilis*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. Type of *Wollemia nobilis* nursery stock approved for entry into New Zealand
Plants *in-vitro*

2. Pests of *Wollemia nobilis*
Refer to the pest list.

3. Entry conditions for:
3.1 *Wollemia nobilis* plants *in-vitro* from Australia
The requirements of this schedule are in addition to the requirements specified in Section 2.2.2 "Entry Conditions for Tissue Culture".

(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*
The full botanical name of *Wollemia nobilis* must be identified upon the phytosanitary certificate.

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken:

The *Wollemia nobilis* plants *in-vitro* have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

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

AND
- derived from explant material which has been surface sterilised in a solution of 0.5% sodium hypochlorite and sterile water, or MPI approved alternative treatment.

AND
- prepared by asexual reproduction (clonal techniques) under sterile conditions.

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

(iv) *Additional declarations to the phytosanitary certificate*
No additional declarations are required.

(v) *Post-entry quarantine*
Post-entry quarantine is not required provided that the above measures have been completed.

Pest List for *Wollemia nobilis*

REGULATED PESTS (actionable)

Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
Botryosphaeria spp.	-
Oomycota	
Pythiales	
Pythiaceae	
Phytophthora cinnamomi	black rot
Arbuscular mychorrhizae	
All regulated species	
Ectomycorrhizae	
All regulated species	

For organisms intercepted that are not listed within this pest list refer to MPI's "Biosecurity Organisms Register for Imported Commodities" to determine regulatory status.

If the organism is not identified or categorised within the register, please contact plantimports@mpi.govt.nz

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:

Approved 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 (MPI) 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 (MPI) 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.

(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

(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 3B
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	
Zantedeschia mild 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 *Zingiber*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

GENERAL CONDITIONS:

Approved 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."