

# **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

Biosecurity New Zealand Animal & Plant Health Directorate PO Box 2526 Wellington 6140, New Zealand www.mpi.govt.nz

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# 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, to incorporate amendments made up to and including 2 March 2021.

Signature of Director of Animal & Plant Health Acting pursuant to delegated Director-General authority

Date:

# REVIEW

Amendments will be made to the signed original as required. The signed original will be held by the Plant Imports Group, Ministry for Primary Industries, Charles Fergusson Building, 34-38 Bowen Street, Wellington.

# AMENDMENT RECORD

This import health standard is amended in accordance with section 24B of the Biosecurity Act 1993 as set out below.

No:	Details:	Date:		
1	Section 2.2.1.7 Pesticide treatments for dormant bulbs	27 April 2005		
2	<i>Lilium</i> schedule of special conditions, sections 2.2.1.6, 2.2.1.7 17 June 2005 and 2.2.2.			
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 and 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	<i>Prunus</i> , <i>Solanum tuberosum</i> , and <i>Vaccinium macrocarpon</i> schedules.	6 July 2010		
15	Allium schedule	13 September 2010		
16	<i>Berberis, Carpinus, Cotoneaster, Eucalyptus, Nandina, Olea, Populus, Pseudotsuga, Ulmus</i> 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 <i>Acca sellowiana</i> and <i>Agonis</i> , with incorporation under the <i>Metrosideros</i> schedule. Amendment to the <i>Eucalyptus</i> and <i>Eugenia</i> schedules.	25 August 2011		
19	Dracaena schedule	12 September 2011		
20	Malus schedule	20 June 2012		
21	Artocarpus schedule	29 June 2012		
22	<i>Cycas, Dracaena, Fuchsia</i> 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 <i>Ceratocystis fimbriata</i> , with renumbering of subsequent sections). Schedules for <i>Acacia</i> , <i>Acrocomia</i> , <i>Carica</i> , <i>Carya</i> , <i>Carya ovata</i> , <i>Citrus</i> , <i>Delphinium</i> , <i>Eucalpytus</i> , <i>Fagus</i> , <i>Fagus</i> <i>sylvatica</i> , <i>Ficus</i> , <i>Fragaria</i> , <i>Juglans</i> , <i>Malus</i> , <i>Mangifera</i> , <i>Metrosideros</i> , <i>Platanus</i> , <i>Populus</i> , <i>Prunus</i> , <i>Quercus</i> , <i>Rubus</i> , <i>Tulipa</i> , <i>Ulmus</i> , <i>Vaccinium</i> and <i>Vitis</i>	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 <i>Acacia</i>	06 May 2016
36	Section 2.2.1.13 (new section for <i>Phellinus noxius</i> , with renumbering of subsequent sections). Schedules for <i>Acacia</i> , <i>Acrocomia</i> , <i>Aesculus</i> , <i>Araucaria</i> , <i>Arbutus</i> , <i>Artocarpus</i> , <i>Camellia</i> , <i>Camellia sinensis</i> , <i>Cedrus</i> , <i>Citrus</i> , <i>Crataegus</i> , <i>Cycas</i> , <i>Delphinium</i> , <i>Diospyros</i> , <i>Eriobotrya</i> , <i>Eucalyptus</i> , <i>Eugenia</i> , <i>Ficus</i> , <i>Fortunella</i> , <i>Hebe</i> , <i>Hydrangea</i> , <i>Litchi</i> , <i>Mangifera</i> , <i>Metrosideros</i> , <i>Nandina</i> , <i>Persea</i> , <i>Planera</i> , <i>Poncirus</i> , <i>Populus</i> , <i>Prunus</i> , <i>Rhododendron</i> , <i>Rosa</i> , <i>Salix</i> , <i>Ulmus</i> , and <i>Vitis</i>	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 <i>Rosa</i>	22 December 2016

39	Sections 2224 2225 (new section for Vulalla fastidiosa)	27 February 2017
39	Sections 2.2.2.4, 2.2.2.5 (new section for <i>Xylella fastidiosa</i> ), 2.2.2.6 (new section for post entry quarantine), and 2.3.	21 February 2017
	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	
40	Updated sections 1.3 and 1.4, and relevant schedules to align	8 March 2017
10	with commencement of Facility Standard: Post Entry Qurantine	0 1/1a/01/2017
	for Plants (MPI.STD.PEQ).	
41	Addition of <i>Petunia</i> schedule.	9 June 2017
42	Amendment to the <i>Petunia</i> schedule with new GM requirements	31 October 2017
43	Amendment to the Vaccinium schedule with a change to post	11 December 2017
	entry quarantine requirements for tissue cultures.	
44	Amendment to the <i>Delphinium</i> schedule with addition of	04 April 2018
4.5	<i>Euryops</i> for conditions for <i>Xylella fastidiosa</i> .	26 4 12010
45	Addition of conditions for <i>Phytophthora capsici</i> , <i>P. palmivora</i>	26 April 2018
	and <i>P. tentaculata</i> in the following schedules: <i>Abies, Acacia, Acer, Acrocomia, Aesculus, Allium, Araucaria, Arbutus,</i>	
	Artocarpus, Calanthe, Carica, Chrysanthemum, Crataegus,	
	Dahlia, Delphinium, Dianthus, Dianthus caryophyllus,	
	Diospyros, Dracaena, Eugenia, Ficus, Gerbera, Hebe, Lilium,	
	Mangifera, Metrosideros, Olea, Paulownia, Phalaenopsis,	
	Phoenix, Solanum, Verbena, Yucca and creation of three new	
	schedules (i.e. Anthurium, Chichorium and Epipremnum	
1.0	schedules).	<b>2</b> (1, <b>2</b> 010
46	Amendment to the <i>Solanum tuberosum</i> schedule with addition of ' <i>Candidatus</i> Liberibacter solanacearum' haplotype B,	26 June 2018
	Columbia basin purple top phytoplasma, <i>Pectobacterium</i>	
	polaris and Potato Virus H.	
47	Amendment to the Anthurium and Rosa schedules with	25 January 2019
	additions of measures for Ralstonia pseudosolanacearum	-
48	Amendment to the Araucaria schedule with addition of Xylella	30 January 2019
	<i>fastidiosa</i> to the "Quarantine Pests" list and also "Conditions for	
	<i>Xylella fastidiosa</i> (section 2.2.1.12), which applies to the members of <i>Broussonetia</i> genus only.	
49	Amendment to the <i>Rosa</i> schedule with addition of measures for	13 February 2019
+2	Grapevine Pinot gris virus	13 1 Coluary 2017
50	Amendment to the Acacia and Epipremnum schedules with	7 March 2019
	addition of measures for Ralstonia pseudosolanacearum	
51	Amendment to the <i>Solanum tuberosum</i> schedule with addition	5 August 2019
	of measures for <i>Ralstonia pseudosolanacearum</i>	20.4
52	Amendment to the <i>Vaccinium</i> schedule with addition of	30 August 2019
<u> </u>	measures for Ralstonia pseudosolanacearum	<u> </u>

53	Amendment to the <i>Actinidia</i> schedule and Section 2.2.1.12 "Measures for <i>Xylella fastidiosa</i> "	29 November 2019
54	Amendment to the <i>Prunus</i> schedule	23 January 2020
56	Amendment to the <i>Ficus</i> schedule with addition of measures for <i>Ralstonia pseudosolanacearum</i>	07 February 2020
57	Amendment to the 'Basic entry conditions' 2.2.1.6 (b) to manage regulated plant mites. Amendment of the <i>Calanthe</i> , <i>Dahlia</i> , <i>Tricyrtis</i> , <i>Verbena</i> , <i>Hydrangea</i> , <i>Gentiana</i> schedules with removal of special measures for <i>Tetranychus kanzawai</i> .	20 May 2020
58	Amendment to the <i>Petunia</i> schedule: addition of option for importers to provide a non-GMO declaration to meet the GM requirements for <i>Petunia</i> nursery stock (whole plants, cuttings and tissue cultures), amendment to information required on GM testing certificates for <i>Petunia</i> nursery stock (whole plants, cuttings and tissue cultures), removal of the requirement for an import permit for <i>Petunia</i> tissue cultures.	20 May 2020
59	Amendment to the <i>Arbutus</i> and <i>Metrosideros</i> schedules editing the <i>Xylella fastidiosa</i> note. Amendment to the <i>Chrysanthemum</i> , <i>Chrysanthemum morifolium</i> and <i>Cichorium</i> schedules to add <i>Xylella fastidiosa</i> measures. Minor amendment to <i>Arbutus</i> , <i>Chrysanthemum</i> , <i>Cichorium</i> and <i>Metrosideros</i> schedules to fix grammatical errors.	2 June 2020
60	Amendment to the Acacia, Aesculus, Petunia, Solanum and Verbena schedules with addition of measures for Columnea latent viroid, Tomato apical stunt viroid and Tomato chlorotic dwarf viroid. Harmonization of measures for Potato spindle tuber viroid on the Chrysanthemum, Dahlia and Diascia schedules. Amendment to the Acacia, Anthurium, Epipremnum, Ficus and Rosa schedules to add acceptable PFPP declaration for Ralstonia pseudosolanacearum from Costa Rica. Addition of Hoya schedule	22 July 2020
61	Minor amendments to the whole IHS to address inconsistencies, typos and other administrative changes.	03 December 2020
62	Removal of woody indexing as a requirement in the <i>Malus</i> schedule of special entry conditions; and a subsequent adjustment to the post entry quarantine period and inspection, testing and treatment requirements table.	2 March 2021
63	Amendment to <i>Chrysanthemum morifolium</i> schedule with addition of measures for potato spindle tuber viroid (PSTVd).	xx June 2021

# 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 34-38 Bowen Street Wellington NEW ZEALAND

Telephone:+64 4 894 5514E-mail:PlantImports@mpi.govt.nzWebsite: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 1993

The following standards can be accessed on the website:

https://www.biosecurity.govt.nz/importing/plants/nursery-stock/requirement-documents-forimporting-nursery-stock/

- Facility Standard PEQ.STD: Post Entry Quarantine for Plants
- Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting
- Facility Standard 155.04.03: Standard for Transitional Facilities for the Identification of Organisms

The following standards can be accessed on the website:

http://mpi.govt.nz/importing/plants/seeds-for-sowing/genetically-modified-seeds/

- PIT-GMO-ALGMOT: Approval of Laboratories for Genetically Modified Organism Testing
- Operational Code: Protocol for Testing for the Presence of Genetically Modified Plant Material

The following standard can be accessed on the website:

#### https://www.mpi.govt.nz/law-and-policy/requirements/transitional-facilities-standards/

• Treatment Requirement MPI-ABTRT: Approved Biosecurity Treatments

#### 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
- ISPM 43. Requirements for the use of fumigation as a phytosanitary measure

### **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) [ISPM Pub. No. 05, 2019].

**Country of origin (of a consignment of plants):** Country where the plants were grown [ISPM Pub. No. 05, 2019].

**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 [ISPM Pub. No. 05, 2019].

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 (Food and Agricultural Organization of the United Nations) in Rome in 1951 and as subsequently amended [ISPM Pub. No. 05, 2019].

**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 [ISPM Pub. No. 05, 2019].

**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 PEQ.STD: Post Entry Quarantine for Plants).

**Lot:** A number of units of a single commodity identifiable by its homogeneity of composition, origin etc., forming part of a consignment [ISPM Pub. No. 05, 2019].

**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 a government to discharge the functions specified by the IPPC [ISPM Pub. No. 05, 2019; 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 [ISPM Pub. No. 05, 2019].

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 [ISPM Pub. No. 05, 2019].

**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].

**Pest free production site:** A production site in which a specific pest is absent, as demonstrated by scientific evidence, and in which, where appropriate, this condition is being officially maintained for a defined period [ISPM 10, 1999; revised CPM, 2015]

**Phytosanitary Certificate:** Certificate patterned after the model certificates of the IPPC [ISPM Pub. No. 05, 2019The 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 [ISPM Pub. No. 05, 2019].

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

**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 [ISPM Pub. No. 05, 2019; 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):** 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 (mature plants with developed roots).

#### 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 Private Bag 63002 Wellington 6140 NEW ZEALAND

Phone: +64 4 916 2426 E-mail: <u>info@epa.govt.nz</u> Website: <u>http://www.epa.govt.nz</u>

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.

#### Guidance:

If EPA approves an application, MPI will prioritise it alongside other tasks and 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:

Ministry for Primary Industries PO Box 2526 34-38 Bowen Street Wellington NEW ZEALAND Telephone:+64 4 894 5514E-mail:PlantImports@mpi.govt.nzWebsite:http://www.mpi.govt.nz

#### Guidance:

#### Convention on International Trade in Endangered Species of Wild Fauna and Flora

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 a specific species requires a CITES import permit, please contact the Department of Conservation (<u>http://www.doc.govt.nz</u>).

#### 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 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 as any of the following types:

- cuttings (dormant and/or non-dormant);
- whole plants (including rooted cuttings);
- dormant bulbs and tubers or;
- 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.

Guidance: To apply for a permit, complete the Form "Application for permit to import nursery stock or seed for sowing" available from MPI's website: <u>https://www.biosecurity.govt.nz/dmsdocument/36648-application-for-permit-to-import-nursery-stock-orseed-for-sowing</u> The completed form should be sent to PlantImports@mpi.govt.nz.

#### 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 "<u>Biosecurity</u> 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 (°C):

Rate (g/m <sup>3</sup> )	Temperature (°C)
48	10 - 15
40	16 - 20
32	21 – 27
28	28 - 32

#### OR

(2) Hot water treatment/chemical treatment (dormant material only): immersion in hot water at a constant temperature of 24°C for at least 2 hours, followed by immersion in hot water at a constant temperature of at least 45°C for at least 3 hours (period required at the stated temperatures excluding warm-up times). Immersion in chlorpyrifos dip (2.4 g a.i. 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 plant 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 deltamethrin and 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 (non-diapausing)

Treatment must be completed either offshore prior to export or on arrival in New Zealand at the importer's expense.

- If performed offshore, the exporting country NPPO must endorse the treatments applied in the disinfestation and/or disinfection treatment section of the phytosanitary certificate including active ingredient/s of the chemical/s used, rate of application, mode of application (i.e. dipping or spraying with a surfactant), treatment time (i.e. how long the treatment was applied for) and date of application.
- If performed on arrival (on-shore), plant material must be treated at an MPI approved facility in accordance with <u>Approved Biosecurity Treatments</u> (ABTRT) by an <u>MPI-Approved Treatment Provider</u>.
- A copy of the chemical label must be supplied if different to the table below.

One of the following two treatments is required:

(1) <u>Methyl bromide</u> (dormant material only): continuous fumigation at atmospheric pressure in accordance with a schedule that achieves the minimum concentration-time product (CT) (minimum achieved dose ( $g \cdot h/m^3$ )) at a minimum temperature (°C) that must not be less than 10 °C, is specified in the table below. Treatment must be achieved over the minimum exposure time (minimum duration (h)) that must not be less than 2 hours and not fall below a minimum concentration (final residual concentration ( $g/m^3$ )) during that treatment, as per the schedules in Table 1. Alternative options for longer exposure times with weaker concentrations or at higher temperature (°C) are also specified in the table below.

Minimum initial concentration (g/m <sup>3</sup> )*			Minimum concentration-time product (CT)/ achieved dose (g·h/m <sup>3</sup> )	Minimum temperature over duration of treatment (°C)	Minimum concentration during fumigation (g/m <sup>3</sup> )**		
$2  h^i$	$2.5 \ h^{ii}$	$3 \ h^{iii}$			$2 \ h^i$	$2.5 \ h^{ii}$	$3 \ h^{iii}$
68	56	48	120	10	51	41	34
57	48	40	100	16	43	35	28
48	40	34	85	21	36	29	24
40	32	28	70	28	30	23	20

\*The shaded area of the table is guidance only. It is guidance on the minimum initial methyl bromide concentration that can achieve the required CT values at the optional temperature and treatment-duration combinations.

\*\*Minimum concentration during fumigation (g/m<sup>3</sup>) must be achieved throughout the treatment and depends on the temperature and duration of the treatment, but must not be less than 2 hours

<sup>i</sup> Treatment duration is over a minimum of 2 continuous hours

<sup>ii</sup> Treatment duration is over a minimum of 2.5 continuous hours

<sup>iii</sup> Treatment duration is over a minimum of 3 continuous hours

#### Guidance:

- While a number of combinations of time and initial concentration may be used to achieve the minimum requirements (CT and minimum final concentration (g/m<sup>3</sup>)) of the treatment, care must be taken to avoid phytotoxicity. Phytotoxic effects of the treatment may increase when a higher initial concentration at lower temperature and reduced duration is used.
- It is the importers responsibility to choose which 'duration of treatment (time (h))' option will be undertaken.
- The importer undertakes treatments at their own risk (see legal disclaimer in Approved Biosecurity Treatments (ABTRT))

The concentration-time product (CT) utilized for methyl bromide treatment in this standard is the sum of the products of the concentration  $(g/m^3)$  and time (h) over the duration of the treatment. This is in accordance with ISPM 43: *Requirements for the use of funigation as a phytosanitary measure*.

#### OR

(2) <u>Chemical treatment</u>: spray to the point of runoff (with a suitable surfactant), or preferably immerse in a dip(s) with agitation, according to the following conditions. The plants must be sprayed/dipped using either OPTION 1 (one-acaricide treatment option) or OPTION 2 (two-acaricides combined treatment option) as indicated 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 at the maximum label rate as shown in the table below;

#### **OPTION 1: One acaricide treatment**

Active ingredient	Chemical group	Rate (g/L water)*	Formulation type**	Re- treatment period ***
Spiromesifen	Tetronic and Tetramic acid derivatives; group 23	0.152	SC	7 -10 days
Milbemectin	Avermectins, Milbemycins; group 6	0.012	SC	
Fenpyroximate	METI acaricides and insecticides; group 21A	0.025	SC	
Bifenazate+ Abamectin	Bifenazate; group 20D Avermectins, Milbemycins; group 6	0.135 0.007	SC	7 -10 days

Select any single acaricide treatment from the list below for dormant or non dormant plant material.

\*Concentration of active ingredient (not amount of concentrate solution)

\*\*SC-Suspension concentrate

\*\*\*Re-treatment must be applied according to the NOVACHEM agrichemical manual or label

#### **OPTION 2: Two acaricides combined treatment**

OPTION 2A: Etoxazole + one of the chemicals selected from *Group a* OPTION 2B: Fenazaquin + one of the chemicals selected from *Group b* 

Active ingredient	Chemical group	Rate (g/L water)	Formulation type*
OPTION 2A (N	Non-dormant material only)		
Etoxazole	Etoxazole; group 10B	0.038	SC
Group 'a'			
Abamectin	Avermectins, Milbemycins; group 6	0.012	EC
Chlorfenapyr	apyr Pyrroles; group 13 0.087 SC		SC
<b>OPTION 2B</b>			
Fenazaquin	METI acaricides and insecticides; group 21A	0.352	SC
Group 'b'			
Acequinocyl	Acequinocyl; group 20B	0.150	SC
Dicofol	Dicofol; group UN	0.694	EC

\*SC-Suspension concentrate; EC-Emulsifiable concentrate

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 (°C):

Rate (g/m <sup>3</sup> )	Temperature (°C)
48	10 - 15
40	16 - 20
32	21 – 27
28	28 - 32

#### OR

(2) Actellic room fumigation: 10 cc Actellic/ $10m^3$  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 24°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 3 hours (period required at the stated temperatures excluding warm-up times). Immersion in chlorpyrifos dip (2.4g a.i. 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	Thiacloprid/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 following combinations of rate  $(g/m^3)$  and temperature (°C):

Rate (g/m <sup>3</sup> )	Temperature (°C)
48	10 – 15
40	16 - 20
32	21-27
28	28-32

#### OR

(2) Actellic room fumigation: 10 cc Actellic/ $10m^3$  of room capacity for 12 hours at  $20^{\circ}C$  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°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 3 hours (period required at the stated temperatures excluding warm-up times).

#### OR

(4) Chemical treatment: immersion in a dip(s) with agitation, according to the following conditions. The bulbs 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 bulb 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 following combinations of rate  $(g/m^3)$  and temperature (°C):

Rate (g/m <sup>3</sup> )	Temperature (°C)
48	10 - 15
40	16 - 20
32	21 - 27
28	28 - 32

#### OR

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

#### AND

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

#### Fungi

Both of the following treatments are required:

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

accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

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

#### AND

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

#### OR

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

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

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

# 2.2.1.8 Measures for *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
- Passiflora

• Erythrina

Fagus

Inga

• Juglans

• Mangifera

• *Metrosideros* 

• *Metroxylon* 

Eucalyptus

• Ficus carica

• Pimenta

• Ostrya

• Populus

- Protea
- Punica
- Quercus
- Schizolobium
- 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)"

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

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.

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.

#### 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:

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:

l

#### a) For dormant bulbs:

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 entry 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 below 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	5 mins	
litre of dip/spray)		
Peroxyacetic acid (80 ppm)	5 mins	Dip at room temperature
		Wetting agent required
Sodium hypochlorite (10%), pH 6.5-7	5 mins	Dip at room temperature

#### AND

(2) Hot water treatment/chemical treatment (dormant material only): immersion in hot water at a constant temperature of 24°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 3 hours (period required at the stated temperatures excluding warm-up times). Immersion in thiabendazole dip (1-1.3g a.i. 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 (including rooted cuttings) from Brazil, Mexico, 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".

#### **Guidance:**

All consignments must meet the basic conditions listed here unless a variation to these conditions is specified in section 3 Schedule of Special Entry Conditions.

#### 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

• Eucalyptus

- Acer
- Aesculus
- Arbutus
- Berberis
- Carpinus
- Castanea
- Corylus
- Cotoneaster

- Fagus
- Fagus sylvatica
- Fuchsia
- Gaultheria
- Kalmia
- Lithocarpus densiflorus
- Olea
- Photinia

- Populus
- Pseudotsuga
- Ouercus
- Rhododendron
- Rubus
- Salix
- Ulmus
- Viburnum

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

- Alnus
- Annona
- Betula
- Buddleja
- Camellia
- *Camellia sinensis*
- Celtis
- Cercis
- Ceratonia
- Chamaecyparis
- *Chimaphila*
- Choisya
- Cistus
- Citrus

- Distylium
- Empetrum •
- Erica
- Garrya
- Gevuina
- Grevillea
- Hedera
- Hydrangea
- Ilex
- Larix
- Liriodendron
- Loropetalum
- Mahonia
- Malus

- Pistacia
- Ribes
- Robinia
- *Rosa* cultivar Pink Meidiland
- *Rosa* cultivar Pink Sevillana
- *Rosa* cultivar Royal Bonica
- Rosa gymnocarpa
- Rosa rugosa
- Rosa sempervirens
- Sambucus
- Tilia

• Clematis
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• Cornus

- Manglietia
- Nerium
- Corylopsis

- Tsuga
  - Veronica spicataZenobia
- Picea

Guidance:

*Vaccinium* species are identified as hosts and have specific measures under the *Vaccinium* Schedule of Special Entry Conditions to manage the risk.

#### i) For countries recognised by MPI as free of *Phytophthora 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*"

#### 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 *Phytophthora ramorum* host material to New Zealand under option ii are required to develop a *Phytophthora 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.

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

#### Guidance:

1. Please note CTO direction CTOPlantDir: 2016004B, directing 'non-host' nursery stock consignments from Costa Rica to be tested for *X. fastidiosa*.

Also,

Please note these plants are not required to meet the X. fastidiosa measures described below.

2. All consignments of whole plants, cuttings, and dormant bulbs must meet the basic conditions listed here unless a variation to these conditions is specificed in section 3 "Schedule of Sspecial entry conditions".

#### 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 countries not recognised by MPI as free from *Xylella fastidiosa*

'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 Americas 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: <u>https://www.biosecurity.govt.nz/dmsdocument/15655</u>

#### 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 countries not recognised by MPI as free from *Phellinus noxius*

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 out 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:

- <u>Africa:</u> 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
- <u>Asia:</u> 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
- <u>Central America & Caribbean:</u> Brazil, Costa Rica, Cuba
- <u>Oceania:</u> 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 PEQ.STD: Post Entry Quarantine for Plants. 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, or testing or treatments are required.

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

Guidance:

A list of MPI-aapproved post entry quarantine facilities for public use is available on MPI's website: <u>http://www.mpi.govt.nz/news-and-resources/resources/registers-and-lists/post-entry/</u>

# 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 tissue culture 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 endorsed on 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; or
- The cultures require a period of growth in post entry quarantine; or
- The cultures must meet the requirements of section 2.2.2.5 "Measures for *Xylella fastidiosa* on tissue culture" 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.

#### Guidance:

All consignments of tissue culture must meet the basic conditions listed here unless a variation to these conditions is specified in section 3 Schedule of Special Entry Conditions.

#### 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 countries not recognised by MPI as free from *Xylella fastidiosa*

'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 Americas 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: <u>https://www.biosecurity.govt.nz/dmsdocument/15655</u>

#### 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 PEQ.STD: Post Entry Quarantine for Plants. The tissue cultures 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; AND
- 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 <u>not</u> 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 Protection Authority (see section 1.5).

# 2.3 COMPLIANCE PROCEDURES

The nursery stock will be inspected using a randomly selected minimum 600 unit sample, to ensure that it complies with the entry conditions.

#### Guidance:

1. On arrival in New Zealand all documentation associated with the importation will be inspected by an inspector to ensure compliance.

2. 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.

3. 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-approved offshore facilities.

# 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-approved facilities, approved to the Facility Standard 155.04.03: *Standard for Transitional Facilities for the Identification of Organisms*. Treatment requirement: *Treatment supplier requirements*.

#### **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*), cutting or whole plant. Each plantlet, cutting or whole plant 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 predetermined 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 1993, 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 1993 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 1993, 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 is 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 reexport; 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 and 2.2.2). Differences may involve:

- special isolation requirements; or
- special treatment requirements; or
- minimum quarantine period; or
- a requirement for a specified Level of PEQ (e.g. L1, L2, L3, L3A, L3B); or
- 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 APPROVAL OF OFFSHORE PLANT QUARANTINE FACILITIES

Nursery stock normally subject to post-entry quarantine may be imported from MPI-approved (registered) facilities overseas under predetermined conditions, with a reduced PEQ requirement following arrival in New Zealand. Overseas facilities must be approved by MPI according to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting. A list of MPI-approved offshore facilities is available on MPI's website: <u>http://mpi.govt.nz/news-and-resources/resources/registers-and-lists/offshore/</u>

# **3.3 AMENDMENTS TO THE PLANTS BIOSECURITY INDEX**

#### Guidance:

The <u>Plants Biosecurity Index</u> will be updated with plant species assessed by the EPA 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 Plants Biosecurity Index website 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. Website 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 capsici*, *Phytophthora ramorum*, Uredinales

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

A. For Whole PlantsPEQ: Level 3BMinimum 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 transitional facility for the identification of organisms approved to facility standard 155.04.03, 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 capsici, Phytophthora palmivora, Phytophthora ramorum, Phytophthora tentaculata, Ralstonia pseudosolanacearum, Tomato chlorotic dwarf viroid, 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 the following genera: *Acacia* and *Passiflora*
- b. Conditions for *Phytophthora capsici* **Note:** Only applies to the following genus: *Portulaca*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

#### c. Conditions for *Phytophthora palmivora*

Note: Only applies to the following genus: Rosmarinus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- d. Conditions for *Phytophthora ramorum* (section 2.2.1.11) **Note:** Only applies to the following species: *Veronica spicata*

e. Conditions for Phytophthora tentaculata

Note: Only applies to the following genera: Artemisia and Mimulus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".

#### f. Conditions for Ralstonia pseudosolanacearum

Note: Only applies to members of the following genus: *Pelargonium* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

OR

ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".

**Note:** For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*".

#### g. Conditions for *Tomato chlorotic dwarf viroid*

Note: Only applies to the following species: Vinca minor

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".
- OR
- ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Vinca minor*".
- h. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- 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 the following genera: Acacia and Passiflora

b. Conditions for *Phytophthora capsici* 

Note: Only applies to the following genus: Portulaca

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- c. Conditions for *Phytophthora palmivora*

Note: Only applies to the following genus: Rosmarinus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- d. Conditions for *Phytophthora ramorum* (section 2.2.1.11) **Note:** Only applies to the following species: *Veronica spicata*
- e. Conditions for *Phytophthora tentaculata* Note: Only applies to the following genera: *Artemisia* and *Mimulus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".

f. Conditions for Ralstonia pseudosolanacearum

Note: Only applies to members of the following genus: Pelargonium

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

OR

ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".

**Note:** For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*".

#### g. Conditions for *Tomato chlorotic dwarf viroid*

Note: Only applies to the following species: Vinca minor

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".
 OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Vinca minor*".
- h. Conditions for Xylella fastidiosa (section 2.2.1.12)

**Guidance for importers**: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

#### C. For Tissue Culture As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2. PLUS

a. Conditions for *Ralstonia pseudosolanacearum* **Note:** Only applies to members of the following genus: *Pelargonium* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

OR

ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".

**Note:** For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*".

b. Conditions for *Tomato chlorotic dwarf viroid* 

Note: Only applies to the following species: *Vinca minor* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Vinca minor*".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2 PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Tomato chlorotic dwarf viroid* during the quarantine period.

- c. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- D. For Whole Plants, Cuttings or Tissue cultures imported into a level 3A PEQ facility Note: Only applies to members of the following genus: *Pelargonium* Guidance for importers: This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*

As per section 2.2.2.4, an import permit is required PEQ: Level 3A Minimum Period: 3 months

- a. Conditions for *Ralstonia pseudosolanacearum* Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Pelargonium*"
- b. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.1.12 or 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 3A PEO</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

# Inspection, Testing and Treatment Requirements for *Pelargonium* and *Vinca minor*

ORGANISM	MPI-ACCEPTED METHODS	Comments		
Bacteria				
Ralstonia pseudosolanacearum	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective media <b>OR</b> PCR	Applies to <i>Pelargonium</i> whole plants, cuttings, and tissue culture imported into a level 3A PEQ facility		
Xylella fastidiosa	Refer to section 2.2.1.12 "Measures for <i>Xylella fastidiosa</i> "	Applies to whole plants and cuttings only. Testing requirements for <i>Xylella</i> <i>fastidiosa</i> are identified in section 2.2.1.12.		
Vincida	Refer to section 2.2.2.5 "Measures for <i>Xylella fastidiosa</i> on tissue culture"	Applies to tissue culture only. Testing requirements for <i>Xylella fastidiosa</i> are identified in section 2.2.2.5.		
Viroids Tomato chlorotic	PCR based methods	Only applies to Vinea minor		
dwarf viroid	r CK based memous	Only applies to <i>Vinca minor</i> whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility		

**Guidance for importers:** Testing in PEQ for the presence of *Tomato chlorotic dwarf viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

**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 palmivora, 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 palmivora* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- b. Conditions for Phytophthora ramorum (section 2.2.1.11), and
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12), and **Guidance for importers**: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- d. Conditions for *Cryphonectria parasitica*<u>Additional Declaration:</u> "*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 Tissue Culture** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

 a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
 Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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 *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 United States of America

Quarantine Pests: Cadang-cadang, *Ceratocystis fimbriata*, Lethal yellowing, *Phellinus noxius*, *Phytophthora palmivora*, *Xylella fastidiosa* 

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

A. For Whole Plants and CuttingsPEQ: Level 2Minimum Period: 3 monthsHeight 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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. Conditions for *Phytophthora palmivora* **Note:** Only applies to the following genera: *Archontophoenix*, *Areca*, *Bactris*, *Borassus*, *Chamaedorea*, *Chrysalidocarpus*, *Cocos*, *Elaeis*, *Howea*, *Livistona*, *Rhopalostylis*, *Sabal*, *Syagrus*, *Trachycarpus* and *Washingtonia*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

#### e. Conditions for Cadang cadang and lethal yellowing

<u>Additional Declaration</u>: "Cadang cadang and lethal yellowing 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**

As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for tissue cultures sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for Cadang cadang and lethal yellowing <u>Additional Declaration</u>: "Cadang cadang and lethal yellowing are not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

**Note:** The guidance below only applies to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Actinidia*".

#### Guidance:

*Actinidia* nursery stock (plants for planting) is no longer eligible for import under this schedule. Import requirements for *Actinidia* plants for planting are now set out in: Import Health Standard: *Actinidia* Plants for Planting, available on the plant imports website at: <u>https://www.biosecurity.govt.nz/importing/plants/nursery-stock/</u> **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 palmivora, Phytophthora ramorum, Phytophthora tentaculata, Tomato chlorotic dwarf viroid, 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 palmivora* **Note:** Only applies to the following genus: *Syringa*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Phytophthora tentaculata* **Note:** Only applies to the following genera: *Heteromeles* and *Rhamnus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".
- d. Conditions for *Tomato chlorotic dwarf viroid* **Note:** Only applies to the following species: *Pittosporum tobira*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Pittosporum tobira*".
- e. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*

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

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

a. Conditions for *Phytophthora palmivora* **Note:** Only applies to the following genus: *Syringa* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Phytophthora tentaculata* 
  - Note: Only applies to the following genera: Heteromeles and Rhamnus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".
- e. Conditions for *Tomato chlorotic dwarf viroid* **Note:** Only applies to the following species: *Pittosporum tobira*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Pittosporum tobira*".
- d. 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 As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2. PLUS

a. Conditions for *Tomato chlorotic dwarf viroid* **Note:** Only applies to the following species: *Pittosporum tobira* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".
   **OR**
- ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Pittosporum tobira*".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Tomato chlorotic dwarf viroid* during the quarantine period.

b. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

ORGANISM	MPI-ACCEPTED METHODS	Comments
Bacteria		
Xylella fastidiosa	Refer to section 2.2.1.12 "Measures for <i>Xylella fastidiosa</i> "	Applies to whole plants, cuttings only. Testing requirements for <i>Xylella</i> <i>fastidiosa</i> are identified in section 2.2.1.12
	Refer to section 2.2.2.5 "Measures for <i>Xylella fastidiosa</i> on tissue culture"	Applies to tissue culture only. Testing requirements for <i>Xylella fastidiosa</i> are identified in section 2.2.2.5
Viroids		
Tomato chlorotic dwarf viroid	PCR based method	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

### Inspection, Testing and Treatment Requirements for Pittosporum tobira

Guidance for importers: Testing in PEQ for the presence of Tomato chlorotic dwarf viroid is only necessary when an importer has been unable to secure one of the alternative declarations.

**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) <u>Phytosanitary requirements</u>

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:

- 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)."
- One of the following Additional Declarations for *Phytophthora capsici* and *P. palmivora*:
  - i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici* and *P. palmivora*".

OR

- ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici* and *P. palmivora*".OR
- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici* and *P. palmivora*".

#### (iv) *Post-entry quarantine*

#### **PEQ**: Level 2

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

#### (v) 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:** an import permit is required.

#### (ii) <u>Special tissue culture media requirements</u>

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	and in flat
Suillia lurida	garlic fly
Suillia univittata	-
Syrphidae	onion bulb fly
Eumerus amoenus	onion bulb fly
Lepidoptera Cossidae	
Dyspessa ulula	garlic moth
<b>Yponomeutidae</b>	game mour
Acrolepia alliella	_
Acrolepia sapporensis	allium leafminer
Acrolepiopsis assectella	leek moth
Thysanoptera	leek mour
Thripidae	
Thrips tabaci [vector]	onion thrips
	omon umpo
Mite	
Arachnida	
Acarina Acaridae	
	bulb mite
Rhizoglyphus setosus Eriophyidae	buib linte
Aceria tulipae [vector]	wheat curl mite
·	wheat curi linte
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	ating nametal
Belonolaimus gracilis	sting nematode
Hoplolaimidae	annial nometede
Helicotylenchus indicus Helicotylenchus microlohus	sprial nematode
Helicotylenchus microlobus Helicotylenchus multicinatus	spiral nematode
Helicotylenchus multicinctus	spiral nematode

Hoplolaimus seinhorsti	lance nematode
Rotylenchulus reniformis Meloidogynidae	reniform nematode
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	
<i>Mycosphaerella allii-cepae</i> (anamorph <i>Cladosporium allii-cepae</i> )	leaf blotch
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
Armillaria mellea (anamorph Rhizomorpha	armillaria root rot
subcorticalis)	
Basidiomycota: Teliomycetes	
Uredinales	
Melampsoraceae	
Melampsora allii-fragilis	rust
Pucciniaceae	1000
Puccinia asparagi	asparagus rust
Basidiomycota: Ustomycetes	asparagus rase
Ustilaginales	
Tilletiaceae	
Urocystis colchici	leaf smut
Oomycota	
Peronosporales	
Peronosporaceae	
Phytophthora capsici	fruit rot of peppers
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	-

**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, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America.

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

> a. Conditions for *Frankliniella occidentalis* and *Liriomyza* spp. <u>Additional Declaration</u>: "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

a. Additional Declaration

i) For bulbs produced under an 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

ii) For bulbs NOT produced under an 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, United States of America.

Quarantine Pests: Chrysomyxa ledi, Microsphaera spp.

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 *Chrysomyxa ledi* and *Microsphaera* spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Chrysomyxa ledi* and *Microsphaera* spp. are not known to occur in \_\_\_\_\_\_ [the country or state of where the plants were grown]".

#### OR

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

#### AND

- 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.

**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, United States of America.

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

a. Conditions for Uredinales
 <u>Additional declaration</u>: "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

a. 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

#### **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

Quarantine Pests: Phytophthora capsici, Ralstonia pseudosolanacearum

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

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

a. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".
   OR
- ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- b. Conditions for *Ralstonia pseudosolanacearum* Note: Only applies to the following genera: *Anthurium*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*)".

OR

ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
Note: For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*".

#### **B. For Tissue Culture** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

a. Conditions for Ralstonia pseudosolanacearum

Note: Only applies to the following genera: Anthurium

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

#### OR

ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
Note: For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*".

#### **C. For Whole Plants, Cuttings or Tissue cultures imported into a level 3A PEQ facility Note:** Only applies to the following genera: *Anthurium*

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum* 

#### **PEQ:** Level 3A **Minimum Period:** 3 months

a. Conditions for *Ralstonia pseudosolanacearum* Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Anthurium*"

#### Inspection, Testing and Treatment Requirements for Anthurium

ORGANISM	MPI-ACCEPTED METHODS	Comments
Bacteria		
Ralstonia	Growing season inspection in PEQ for	Applies to Anthurium whole
pseudosolanacearum	symptom expression AND plating on	plants, cuttings, and tissue
	selective media <b>OR</b> PCR	culture imported into a level
		3A PEQ facility

**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: Leeches, snails, snail eggs, worms

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

A. For Whole PlantsPEQ: Level 2Minimum Period: 3 months

a. 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; and
- 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.

**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, Phytophthora capsici, Phytophthora palmivora, 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 *Phellinuis noxius* (section 2.2.1.13)
- b. Conditions for *Phytophthora capsici* **Note:** Only applies to the following genus: *Piper*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- c. Conditions for Phytophthora palmivora

**Note:** Only applies to the following genera: *Aleurites, Anacardium, Annona, Azadirachta, Bougainvillea, Pachira* and *Piper* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- d. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Note:** Only applies to the following genus: *Broussonetia*

**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 Cuttings PEQ:** Level 2 **Minimum Period:** 3 months

a. Conditions for *Phytophthora capsici* **Note:** Only applies to the following genus: *Piper* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- b. Conditions for Phytophthora palmivora
  - **Note:** Only applies to the following genera: *Aleurites, Anacardium, Annona, Azadirachta, Bougainvillea, Pachira* and *Piper*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Note: Only applies to the following genus: *Broussonetia* 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

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

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
Note: Only applies to the following genus: *Broussonetia*Guidance for importers: There will be a minimum quarantine period of <u>6 months</u> in a Level 2 PEQ greenhouse, for tissue cultures from countries <u>not</u> 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 *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 palmivora, Phytophthora ramorum, Phytophthora tentaculata, Xylella fastidiosa* 

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

A. For Whole PlantsPEQ: Level 2Minimum Period: 3 months

a. Conditions for *Phytophthora palmivora* **Note:** Only applies to the following genus: *Magnolia* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Phytophthora tentaculata* **Note:** Only applies to the following genus: *Ceanothus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".
- d. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Note: Only applies to the members of the *Arctostaphylos*, *Laurus* and *Magnolia* genera
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*

e. Conditions for *Phellinus noxius* (section 2.2.1.13) Note: Applies to the following species: *Michelia compressa*, *Michelia figo*, *Osmanthus fragrans*, and applies to all members of the *Cinnamonum* genus

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

a. Conditions for *Phytophthora palmivora* **Note:** Only applies to the following genus: *Magnolia* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Phytophthora tentaculata* **Note:** Only applies to the following genus: *Ceanothus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".

#### d. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only applies to the members of the *Arctostaphylos*, *Laurus* and *Magnolia* genera **Guidance for importers**: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

#### C. For Tissue Cultures

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

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
 Note: Only applies to the members of the *Arctostaphylos*, *Laurus* and *Magnolia* genera
 Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> 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, United States of America.

Quarantine Pests: Gymnosporangium clavipes, Gymnosporangium globosum

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

#### A. For Whole Plants, Cuttings and Tissue Cultures

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

- 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. Conditions for *Gymnosporangium clavipes and Gymnosporangium globosum* <u>Additional Declaration</u>: "*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]".

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

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

**A. 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 *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, United States of America:

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

> a. 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

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, United States of America:

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

- a. 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

#### **D. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

a. Conditions for virus diseases

<u>Additional Declaration</u>: "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 *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:

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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*

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

As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for tissue cultures sourced from countries <u>not</u> 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, United States of America.

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

> a. Conditions for Aster yellows phytoplasma <u>Additional Declaration</u>: "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**

a. Conditions for Aster yellows phytoplasma <u>Additional Declaration</u>: "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 Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

# Begonia

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

# **GENERAL CONDITIONS:**

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, United States of America:

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

#### a. Additional Declaration

i) For bulbs produced under an 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

ii) For bulbs NOT produced under an 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, United States of America:

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

a. 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

# **D. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

a. Conditions for virus diseases
 <u>Additional declaration</u>: "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 *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: Phytophthora ramorum, Uredinales

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

A. 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)
- b. Additional Declarations
  - i) "The plants were inspected during the previous growing season and no rust diseases were detected".

#### AND

ii) "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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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 Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

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

# Bowenia

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

# **GENERAL CONDITIONS:**

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 Tissue Cultures** 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, United States of America:

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

a. 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

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, United States of America:

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

a. 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

# **D. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

 a. Conditions for Caladium virus X <u>Additional Declaration</u>: "The cultures have been derived from parent stock free of Caladium virus X."

# Calanthe

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

# **GENERAL CONDITIONS:**

#### Approved Countries: All

**Quarantine Pests:** *Phytophthora capsici, Phytophthora palmivora, Tetranychus kanzawai,* Uredinales

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

#### A. For Whole Plants PEQ: Level 2 Minimum Period: 1 year

- a. 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. Conditions for *Phytophthora capsici* **Note:** Only applies to the following genus: *Vanilla*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

#### c. Conditions for *Phytophthora palmivora*

Note: Only applies to the following genera: Epidendrum and Vanilla

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

**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, United States of America.

Quarantine Pests: Phellinus noxius, Phytophthora ramorum, Tetranychus kanzawai

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

A. For Whole PlantsPEQ: Level 2Minimum Period: 3 monthsNote: 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 CuttingsPEQ: Level 2Minimum Period: 3 monthsNote: 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:**

ApprovedAfghanistanCountries:ArmeniaAzerbaijanBangladeshBhutanBruneiCambodiaChinaGeorgiaIndiaIndiaIndonesia	Iran Iraq Israel Japan Jordan Kazakhstan Kuwait Kyrgyzstan Laos Lebanon Malaysia	Mongolia Myanmar Nepal North Korea Oman Pakistan Philippines Saudi Arabia Singapore South Korea Sri Lanka	Syria Taiwan Tajikistan Thailand Turkey Turkmenistan United Arab Emirates Uzbekistan Vietnam Yemen
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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 PlantsPEQ: Level 3BMinimum 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 Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS** 

As per section 2.2.2.4, an import permit is required 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)
 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 Australia and South Africa

**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.

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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

#### **D. For Tissue Cultures from All Countries** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

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

"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, Phytophthora capsici, Phytophthora palmivora

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

OPTION 1: A. For Whole Plants PEQ: Level 2 Minimum Period: 3 months

- a. 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. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

# OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- c. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

# **B. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2 **PLUS**

a. 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)
- b. 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 **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, United States of America

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

#### As per section 2.2.2.4, an import permit is required 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)

**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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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

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

- 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 <u>6 months in a Level 2 PEO</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, 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, United States of America.

**Quarantine Pests:** Ceratocystis fagacearum, Conotrachelus carinife, Cryphonectria parasitica, Curculio spp., 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- c. Conditions for Cryphonectria parasitica and Ceratocystis fagacearum

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) *"Cryphonectria parasitica* and *Ceratocystis fagacearum* are not known to occur in \_\_\_\_\_[the country/state where the plants were grown]".

OR

 ii) "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 Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

#### As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Conditions for Cryphonectria parasitica and Ceratocystis fagacearum

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) *"Cryphonectria parasitica* and *Ceratocystis fagacearum* are not known to occur in \_\_\_\_\_[the country/state where the plants were grown]".

OR

ii) "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* and *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 transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

# Chrysanthemum

**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, United States of America.

**Quarantine Pests**: *Phytophthora tentaculata*, *Potato spindle tuber viroid*, 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 Uredinales

<u>Additional Declaration</u>: "Rust diseases of genus *Coleosporium* and *Cronartium* are not known to occur on \_\_\_\_\_ [the host species being imported] in \_\_\_\_\_ [the country in which the plants were grown]".

b. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".
- OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Chrysanthemum*".
- c. Conditions for *Phytophthora tentaculata* **Note:** Only applies to the following genus: *Argyranthemum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".

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

#### **B.** For Tissue Cultures

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

a. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Chrysanthemum*".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

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

# Inspection, Testing and Treatment Requirements for Chrysanthemum

ORGANISM	MPI-ACCEPTED METHODS	Comments
Viroids		
Potato spindle tuber viroid	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Potato spindle tuber viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

# 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., *Potato spindle tuber viroid,* virus diseases, *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)
   Note: Only applies to the members of the *Dendranthema* genus
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Frankliniella occidentalis and Liriomyza spp.*" <u>Additional Declaration</u>: "The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

c. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

iv) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

v) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

OR

 vi) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Chrysanthemum morifolium*".
 <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Potato* spindle tuber viroid during the quarantine period.

# **B.** For Tissue Cultures

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

a. Conditions for virus diseases

<u>Additional Declaration</u>: "The cultures have been derived from parent stock tested and found free of virus or virus like diseases."

- b. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Note: Only applies to the members of the *Dendranthema* genus
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- c. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

iv) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

v) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

OR

vi) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Chrysanthemum morifolium*".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

# **Inspection, Testing and Treatment Requirements for** *Chrysanthemum morifolium*

ORGANISM	MPI-ACCEPTED METHODS	Comments
Viroids		
Potato spindle tuber viroid	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Potato spindle tuber viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

**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 *Cichorium*", 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 tentaculata, 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 tentaculata

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".
   **OR**
- ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".

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

#### **B. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
 Note: Only applies to the members of the *Santolina* genus
 Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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 *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-approved facilities (quarantine stations)

An offshore approved facility is a facility that has been approved to the Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Citrus*, the approved 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 approved facility as specified in the agreement between MPI and the approved facility operator. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

#### (iii) <u>Phytosanitary requirements</u>

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 an MPIapproved facility

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the approved 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 approved facility as required in the agreement between MPI and the approved facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved 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/tests 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-approved 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 approved 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-approved facility. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

#### (v) <u>Post-entry quarantine</u>

#### **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/tests are required.

#### 3.3 Citrus plants in tissue culture from offshore MPI-approved facilities

An offshore approved facility is a facility that has been approved to the Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Citrus*, the approved 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) <u>Pest proof container and growing media for tissue culture</u>

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 approved facility as specified in the arrangement between MPI and the approved facility operator. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

# (iv) <u>Phytosanitary requirements</u>

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 an MPIapproved facility

AND

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

#### (v) <u>Additional declarations to the phytosanitary certificate</u>

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 approved facility as specified in the agreement between MPI and the approved facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved 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/tests are required.

#### **3.4** *Citrus* plants in tissue culture from non-approved facilities in any country (i) <u>*Documentation*</u>

#### 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) <u>Pest proof container and growing media for tissue culture</u>

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) <u>Phytosanitary requirements</u>

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-approved 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/tests 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 Scolvtidae Salagena sp. Xylosandrus germanus alnus ambrosia beetle Diptera **Cecidomviidae** leafcurling midge Contarinia citri Contarinia okadai citrus flower gall midge Trisopsis sp. Chamaemviidae Leucopis alticeps [Animals Biosecurity] Drosophilidae Drosophila paulistorum Drosophila pseudoobscura Drosophila simulans Drosophila willistoni Tephritidae island fruit fly Dirioxa pornia 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 Nvsius 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 whitefly Aleurocanthus citriperdus Aleurocanthus spiniferus orange spiny whitefly Aleurocanthus spp. whiteflies Aleurocanthus woglumi citrus blackfly Aleurodicus dispersus spiralling whitefly Marlatt whitefly Aleurolobus marlatti

Aleuroplatus sp. Aleurothrixus floccosus Aleurotuba jelinekii Aleurotuberculatus aucubae Bemisia citricola Dialeurodes citri Dialeurodes citrifolii Dialeurolonga sp. Parabemisia myricae Siphoninus phillyreae Aphididae Aphis fabae Aulacorthum magnoliae Cicadellidae Asymmetrasca decedens Circulifer opacipennis Circulifer tenellus Cuerna costalis Edwardsiana flavescens Empoasca bodenheimeri Empoasca citrusa Empoasca decipiens Empoasca distinguenda Empoasca fabae Empoasca onukii Homalodisca coagulata Homalodisca lacerta Jacobiasca lybica Neoaliturus haematoceps Penthimiola bella Scaphytopius nitridus Cicadidae Cryptotympana facialis Meimuna opalifera Coccidae Ceroplastes floridensis Ceroplastes japonicus Ceroplastes rubens Ceroplastes rusci Coccus celatus Coccus pseudomagnoliarum Coccus viridis Cribrolecanium andersoni Gascardia brevicauda Protopulvinaria pyriformis Pulvinaria aethiopica Pulvinaria aurantii Pulvinaria cellulosa Saissetia citricola Saissetia somereni Dactylopiidae Dactylopius filamentosis Dactylopius vastator Diaspididae Aonidiella citrina Chrysomphalus aonidum Chrysomphalus bifasciculatus Chrysomphalus dictyospermi Chrysomphalus pinnulifera Ischnaspis longirostris

whitefly woolly whitefly aucuba whitefly citrus whitefly cloudywinged whitefly Japanese bayberry whitefly phillyrea whitefly bean aphid Japanese elder aphid leafhopper beet leafhopper leafhopper leafhopper green citrus leafhopper green leafhopper potato leafhopper tea green leafhopper glassy-winged sharpshooter cotton jassid leafhopper citrus leafhopper leafhopper black cicada elongate cicada Florida wax scale pink wax scale red wax scale fig wax scale citricola scale green scale white powdery scale white waxy scale pyriform scale soft green scale citrus cottony scale pulvinaria scale citrus string cottony scale vellow scale Florida red scale brown scale dictyospermum scale false purple scale

black thread scale

Lepidosaphes beckii Lepidosaphes gloverii Parlatoria ziziphi Pseudaonidia duplex Selenaspidus articulatus Unaspis citri Unaspis yanonensis Flatidae Colgar peracuta Geisha distinctissima Lawana conspersa Metcalfa pruinosa Fulgoridae Anzora unicolor Margarodidae Drosicha howardi Icerva sevchellarum Ortheziidae Nipponorthezia ardisiae Pseudococcidae Allococcus spp. Ferrisia consobrina Ferrisia virgata Nipaecoccus vastator Nipaecoccus viridis Paracoccus burnerae Planococcus kraunhiae Planococcus lilacinus Planococcus minor Pseudococcus citriculus Pseudococcus commonus Pseudococcus filamentosus Rastrococcus spinosus Rhizoecus kondonis **Psyllidae** Diaphorina citri Trioza ervtreae [vector] 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]

purple scale Glover scale black parlatoria scale camphor scale West Indian red scale citrus snow scale Japanese citrus scale

green broad-winged planthopper green flatid planthopper planthopper

persimmon mealybug Seychelles scale

ensign scale

- mealybug striped mealybug nipa mealybug hibiscus mealybug spherical mealybug Japanese wisteria mealybug citrus mealybug passionvine mealybug smaller citrus mealybug

mealybug mealybug Kondo mealybug

citrus psyllid citrus psyllid

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 hervous [Animals Biosecurity]	_
Metaphycus stanleyi [Animals Biosecurity]	_
Metaphycus staticy [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 sexdens Atta texana	- Texas leaf-cutting ant
	- Texas leaf-cutting ant -
Atta texana	- Texas leaf-cutting ant - -
Atta texana Camponotus rufoglaucus Crematogaster castanea	- Texas leaf-cutting ant - - -
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei	- Texas leaf-cutting ant - - cocktail ant
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity]	- -
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity] Lepisiota capensis [Animals Biosecurity]	- -
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity] Lepisiota capensis [Animals Biosecurity] Myrmicaria natalensis	- - cocktail ant -
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity] Lepisiota capensis [Animals Biosecurity] Myrmicaria natalensis Pheidole tenuinodis	- - cocktail ant - - ant
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity] Lepisiota capensis [Animals Biosecurity] Myrmicaria natalensis Pheidole tenuinodis Polyrhachis schistaceus	- - cocktail ant - - ant ant
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity] Lepisiota capensis [Animals Biosecurity] Myrmicaria natalensis Pheidole tenuinodis Polyrhachis schistaceus Solenopsis invicta [Animals Biosecurity]	- - cocktail ant - - ant
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity] Lepisiota capensis [Animals Biosecurity] Myrmicaria natalensis Pheidole tenuinodis Polyrhachis schistaceus Solenopsis invicta [Animals Biosecurity] Tapinoma arnoldi	- - cocktail ant - - ant ant
Atta texana Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity] Lepisiota capensis [Animals Biosecurity] Myrmicaria natalensis Pheidole tenuinodis Polyrhachis schistaceus Solenopsis invicta [Animals Biosecurity] Tapinoma arnoldi Technomyrmex albipes foreli [Animals Biosecurity]	- - cocktail ant - - ant ant
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Trichogramma platneri [Animals Biosecurity] Vespidae Polistes spp. [Animals Biosecurity] Isoptera Termitidae Odontotermes lokanandi Lepidoptera Arctiidae Lemyra imparilis Blastobasidae Holcocera iceryaeella Cosmopterigidae Pyroderces rileyi Geometridae Anacamptodes fragilaria Ascotis selenaria reciprocaria Gymnoscelis rufifasciata Hyposidra talaca Gracillariidae Phyllocnistis citrella Hepialidae Endoclita excrescens Endoclita sinensis Lycaenidae Virachola isocrates Lymantriidae Orgyia vetusta Metarbelidae Indarbela tetraonis Noctuidae Arcte coerula Eudocima fullonia Helicoverpa assulta Helicoverpa punctigera Tiracola plagiata Xylomyges curialis Nymphalidae Charaxes jasius Oecophoridae Psorosticha melanocrepida Psorosticha zizyphi Stathmopoda auriferella Papilionidae Papilio aegeus aegeus Papilio anactus Papilio cresphontes Papilio dardanus cenea Papilio demodocus Papilio demoleus demoleus Papilio helenus nicconicolens Papilio machaon asiatica Papilio memnon Papilio memnon thunbergii Papilio nireus lyaeus Papilio polytes polytes Papilio protenor demetrius Papilio xuthus Papilio zelicaon Psychidae Eumeta hardenbergi

paper wasps termite mulberry tiger moth pink scavenger caterpillar koa haole looper citrus looper geometrid moth citrus leafminer Japanese swift moth pomegranate butterfly western tussock moth stem borer fruit-piercing moth fruit-piercing moth cape gooseberry budworm oriental tobacco budworm banana fruit caterpillar noctuid moth nymphalid butterfly citrus leafroller citrus leafroller apple heliodinid small citrus butterfly orange dog orange dog citrus swallowtail citrus swallowtail anise swallowtail

Eumeta japonica Eumeta minuscula tea bagworm Eumeta moddermanni Hyalarcta huebneri Pyralidae Apomyelois ceratoniae Tortricidae Adoxophyes sp. Amorbia cuneana leafroller Archips argyrospilus Archips machlopis leafroller Archips occidentalis leafroller Archips rosanus Argyrotaenia citrana Cacoecimorpha pronubana Cryptophlebia batrachopa Crvptophlebia leucotreta Homona magnanima Isotenes miserana Platynota stultana Tortrix capensana Yponomeutidae Prays citri Prays parilis Neuroptera Chrysopidae Chrysopa oculata [Animals Biosecurity] Conioptervgidae Coniopteryx vicina [Animals Biosecurity] Conwentzia barretti [Animals Biosecurity] Orthoptera Acrididae Zonocerus elegans Grvllidae Ornebius kanetataki cricket Tettigoniidae *Caedicia* sp. Holochlora japonica Microcentrum retinerve Scudderia furcata **Psocoptera** Archipsocidae Archipsocus sp. Thysanoptera Aeolothripidae Franklinothrips vespiformis [Animals Biosecurity] Thripidae Chaetanaphothrips orchidii Leptothrips mali Scirtothrips aurantii Scirtothrips citri Scirtothrips dorsalis Scirtothrips mangiferae Scolothrips sexmaculatus [Animals Biosecurity] Taeniothrips kellyanus Taeniothrips sp. Thrips coloratus thrips Thrips flavus Thrips palmi palm thrips **Unknown Insecta** 

leaf case moth date pyralid fruit tree leafroller rose leafroller orange tortrix carnation leafroller false codling moth oriental tea tortrix orange fruitborer omnivorous leafroller tortricid moth citrus flower moth citrus flower moth elegant grasshopper Japanese broadwinged katydid smaller angular-winged katydid fork-tailed bush katydid bark louse banana rust thrips black hunter thrips citrus thrips citrus thrips chilli thrips

mango thrips flower thrips

#### **Unknown Insecta**

Cosmophyllum pallidulum

#### Mi

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 chilensis Brevipalpus lewisi	false spider mite bunch mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity]	bunch mite
Brevipalpus lewisi Brevipalpus obovatus	bunch mite privet mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity]	bunch mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b>	bunch mite privet mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii	bunch mite privet mite - - tenuipalpid mite clover mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis Eutetranychus africanus	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis Eutetranychus africanus Eutetranychus banksi	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus gumensis Eutetranychus africanus Eutetranychus banksi Eutetranychus orientalis	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus lewisi Eutetranychus africanus Eutetranychus banksi Eutetranychus orientalis Oligonychus mangiferus	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus lewisi Eutetranychus africanus Eutetranychus banksi Eutetranychus orientalis Oligonychus mangiferus Tetranychus kanzawai	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus umensis Eutetranychus africanus Eutetranychus banksi Eutetranychus orientalis Oligonychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b>	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus lewisi Eutetranychus africanus Eutetranychus banksi Eutetranychus orientalis Oligonychus mangiferus Tetranychus kanzawai	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis Eutetranychus africanus Eutetranychus banksi Eutetranychus orientalis Oligonychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b> Tuckerella knorri	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis Eutetranychus africanus Eutetranychus orientalis Oligonychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b> Tuckerella knorri	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus kankitus Eotetranychus lewisi Eotetranychus orientalis Eutetranychus banksi Eutetranychus banksi Eutetranychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b> Tuckerella knorri <b>Spider</b> Arachnida	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis Eutetranychus africanus Eutetranychus banksi Eutetranychus banksi Eutetranychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b> Tuckerella knorri <b>Spider</b> Arachnida Araneae	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus lewisi Eotetranychus lewisi Eutetranychus africanus Eutetranychus banksi Eutetranychus banksi Eutetranychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b> Tuckerella knorri <b>Spider</b> Arachnida Araneae Clubionidae	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis Eutetranychus africanus Eutetranychus banksi Eutetranychus banksi Eutetranychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b> Tuckerella knorri <b>Spider</b> Arachnida Araneae Clubionidae Cheiracanthium mildei [Animals Biosecurity]	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis Eutetranychus africanus Eutetranychus banksi Eutetranychus banksi Eutetranychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b> Tuckerella knorri <b>Spider</b> Arachnida Araneae Clubionidae Cheiracanthium mildei [Animals Biosecurity]	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite
Brevipalpus lewisi Brevipalpus obovatus Tenuipalpus emeticae [Animals Biosecurity] Tuckerella ornata Ultratenuipalpus gonianaensis <b>Tetranychidae</b> Calacarus citrifolii Eotetranychus kankitus Eotetranychus kankitus Eotetranychus lewisi Eotetranychus yumensis Eutetranychus africanus Eutetranychus banksi Eutetranychus banksi Eutetranychus mangiferus Tetranychus kanzawai <b>Tuckerellidae</b> Tuckerella knorri <b>Spider</b> Arachnida Araneae Clubionidae Cheiracanthium mildei [Animals Biosecurity]	bunch mite privet mite - - tenuipalpid mite clover mite tetranychid mite big beaked plum mite Yumi spider mite tetranychid mite Texus citrus mite pear leaf blister mite mango spider mite kanzawa mite

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#### Mollusc Gastropoda

Stylommatophora	
Achatinidae Achatina immaculata	
Lissachatina immaculata	- snail
Bradybaenidae	shan
Acusta despecta sieboldiana	snail
Subulinidae	
Rumina decollata	snail
Urocyclidae	
Urocyclus flavescens	-
Urocyclus kirkii	-
Fundad	
Fungus Ascomycota	
Diaporthales	
Valsaceae	
Diaporthe rudis (anamorph Phomopsis rudis)	phomopsis canker
Dothideales	
Elsinoaceae	
Elsinoe australis	sweet orange scab
Capnodiaceae	
Capnodium citri	sooty mould
Didymosphaeriaceae	
<i>Didymosphaeria</i> sp. <b>Microascales</b>	
Ceratocysticaceae	
Ceratocysticaceae Ceratocystis fimbriata	
Mycosphaerellaceae	-
Guignardia citricarpa (anamorph Phyllosticta	citrus black spot
<i>citricarpa</i> ) [black spot strain]	endus bluek 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	- sour rot
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	_
ματισμισματια ματαστάζαμα	

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.	
Oomycota: Oomycete	
Peronosporales	
Peronosporaceae	formit and of a company
Phytophthora capsici	fruit rot of peppers
Phytophthora palmivora	black rot
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\*

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32°C.
eratures

ORGANISM TYPES	MPI-ACCEPTED METHODS	
satsuma dwarf	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures	
nepovirus [Natsudaidai	18 to 25°C.	
dwarf strain]		
yellow vein clearing of	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators	
lemon	at cool temperatures 18 to 25°C.	
Viroids		
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-	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow	
IV)	citron at hot temperature 27 to 32°C.	
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow	
6	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.	
Diseases of unknown aet		
Australian citrus	Country freedom OR other suitable test	
dieback		
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	
entrus onghe disease	before releasing from quarantine.	
citrus fatal yellows	Country freedom OR graft inoculated <i>Citrus macrophylla</i> .	
citrus impietratura	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth	
disease	indicators at cool temperatures 18 to 25°C.	
citrus sunken vein	Country freedom OR other suitable test.	
disease		
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.	
e onieu ( e gunn	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	
5	temperature 27 to 32°C.	
Kassala disease	Country freedom, cuttings collected from kassala free area.	
lemon sieve tube	Country freedom OR other suitable test.	
necrosis	<b>,,</b>	
shell bark of lemons	Country freedom OR other suitable test.	
zonate chlorosis	Country freedom, cuttings collected from kassala free area.	
Phytoplasmas		
<i>Candidatus</i> phytoplasma	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18	
aurantifolia	to 25°C.	
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot	
1	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 *Clivia*", 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**

a. Conditions for virus diseases
 <u>Additional Declaration</u>: "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 *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:

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

a. Conditions for *Pratylenchus convallariae*<u>Additional Declaration</u>: "*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. For Whole Plants PEQ: Level 3B Minimum Period: 3 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. **PLUS** 

As per section 2.2.2.4, an import permit is required 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 *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., 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* (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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from Xylella fastidiosa
- c. Conditions for *Gymnosporangium* spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Gymnosporangium* spp. are not known to occur on \_\_\_\_\_[name of plant species] in \_\_\_\_\_[the country or state where the plants were produced]".

OR

- ii) "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 As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2. PLUS

 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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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 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, United States of America.

**Quarantine Pests**: Gymnosporangium clavipes, Gymnosporangium globosum, Phellinus noxius, Phytophthora capsici

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

#### A. For Whole Plants

# **OPTION 1 PEO:** Level 2 Minimum Period: 6 months

- a. Conditions for *Gymnosporangium clavipes* and *Gymnosporangium globosum* 
  - i) Additional Declaration: "Gymnosporangium clavipes and Gymnosporangium *globosum* are not known to occur on \_\_\_\_\_ [host species being imported] [the country or state in which the plants were grown]". in 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. Conditions for *Phellinus noxius* (section 2.2.1.13) Note: Only applies to members of the *Crataegus* genus
- c. Conditions for Phytophthora capsici Note: Only applies to members of the Crataegus genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from Phytophthora capsici".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for Phytophthora capsici".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for Phytophthora capsici".

# **OPTION 2** PEO: 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 transitional facility for the identification of organisms approved to facility standard 155.04.03, 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, United States of America:

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

a. 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

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, United States of America:

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

a. 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

# **D. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

a. Conditions for virus diseases
 <u>Additional Declaration</u>: "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 *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, United States of America:

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

#### a. Additional Declaration

i) For bulbs produced under an 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

ii) For bulbs NOT produced under an 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, United States of America:

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

# a. 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

# **D.** For Tissue Cultures

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

a. Conditions for virus diseases
 <u>Additional Declaration</u>: "The cultures have been derived from parent stock tested and
 found free of virus diseases."

**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, United States of America (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

a. Conditions for *Aulacaspis yasumatsui* <u>Additional declaration</u>: "The nursery stock has been sourced from a 'pest free area', free from *Aulacaspis yasumatsui*"

# **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 *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*, *Phytophthora capsici*, *Potato spindle tuber viroid*, *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

- a. Conditions for Uredinales
   <u>Additional Declaration</u>: "Rust diseases are not known to occur on *Dahlia* in
   [the country in which the plants were grown]".
- b. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- c. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Dahlia*".

**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

# 1) For bulbs produced under an MPI-approved Dutch bulb propagation scheme

a. Additional Declaration

"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."

b. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

#### c. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

#### 2) For bulbs NOT produced under an MPI-approved bulb propagation scheme:

a. 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."

b. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

# OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

c. Conditions for *Potato spindle tuber viroid* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

#### OPTION 2: PEQ: Level 1 Minimum Period: 3 months

a. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- b. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".
- OR
- ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

#### **C. For Dormant Bulbs from the United States of America No import permit is required unless the bulbs require post-entry quarantine PEO:** None or Level 2 (see below)

a. 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".

b. Conditions for Phymatotrichopsis omnivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The dormant tubers have been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

# OR

ii) "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".

# AND

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
- c. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

# OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- d. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".**OR**
- ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

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, United States of America:

**PEQ:** Level 1 or Level 2 (see below) **Minimum Period:** 3 months

a. 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."
- b. Conditions for Phymatotrichopsis omnivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The dormant tubers have been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

# OR

ii) "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".

#### AND

- 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
- c. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

# OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

# OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

#### d. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".**OR**
- ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

# **E.** For Tissue Cultures

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

a. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Dahlia*".
  Guidance for importers: Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.
- b. Conditions for virus diseases

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

# Inspection, Testing and Treatment Requirements for Dahlia

ORGANISM	MPI-ACCEPTED METHODS	Comments
Viroids		
Potato spindle tuber viroid	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Potato spindle tuber viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

**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, United States of America.

**Quarantine Pests**: Ceratocystis fimbriata, Phellinus noxius, Phytophthora capsici, Phytophthora palmivora, Phytophthora tentaculata, 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 *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Erythrina* genus
- b. 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
- c. Conditions for *Phytophthora capsici* **Note:** Only applies to the following genus: *Carolinianum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

d. Conditions for *Phytophthora palmivora* 

Note: Only applies to the following genus: Erythrina

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

e. Conditions for *Phytophthora tentaculata* **Note:** Only applies to the following genera: *Delphinium* and *Salvia* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".
- f. Conditions for Xylella fastidiosa (section 2.2.1.12)

**Note:** Only applies to the members of the *Convolvulus*, *Crepis*, *Erigeron*, *Euryops*, *Geranium*, *Phyllanthus*, *Salvia* and *Senecio* genera **Guidance for importers:** The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

g. Conditions for Uredinales <u>Additional Declaration</u>: "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**

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*, *Euryops*, *Geranium*, *Phyllanthus*, *Salvia* and *Senecio* genera
 Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEO</u> greenhouse, for tissue cultures from countries <u>not</u> 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., *Phytophthora capsici*, *Phytophthora palmivora*, Uredinales

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

A. For Whole PlantsPEQ: Level 2Minimum Period: 3 months

a. Conditions for Frankliniella occidentalis and Liriomyza spp.

<u>Additional Declaration</u>: "The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

- b. Conditions for Uredinales <u>Additional Declaration</u>: "The plants were inspected during the growing season and no rust diseases were found".
- c. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

d. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

# OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

# OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

# **B.** For Tissue Cultures

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

# Dianthus caryophyllus

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

#### **GENERAL CONDITIONS:**

#### Approved Countries: All

**Quarantine Pests**: *Frankliniella occidentalis*, *Liriomyza* spp., *Phytophthora capsici*, *Phytophthora palmivora* 

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

A. For Whole Plants OPTION 1: PEQ: Level 2 Minimum Period: 3 months

a. Conditions for Frankliniella occidentalis and Liriomyza spp.

<u>Additional Declaration</u>: "The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

b. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- c. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

#### **OPTION 2: (For Netherlands only) PEQ:** Level 2 **Minimum Period**: 4 weeks

#### a. Additional Declarations

i) "The imported plants meet the requirements of the NAKtuinbouw Elite (Class SEE or EE) [choose one] certification scheme."

#### AND

- ii) "The plants have been held at  $1.5^{\circ}C \pm 0.5^{\circ}C$  for 2 days, then fumigated with methyl bromide at 14g/m<sup>3</sup> for 4 hours at 15°C and packed so that re-infestation with insects cannot occur."
- b. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

# OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

c. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

#### **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

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

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

a. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Diascia*".

#### **B.** For Tissue Cultures

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

a. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Diascia*".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level</u> <u>2 PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

# Inspection, Testing and Treatment Requirements for Diascia

ORGANISM	MPI-ACCEPTED METHODS	Comments
Viroids		
Potato spindle tuber viroid	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Potato spindle tuber viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

**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
 "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 United States of America No import permit is required unless the bulbs require post-entry quarantine. PEQ:** None or Level 2 (see below)

- Č (
  - a. Additional Declarations
    - i) "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

ii) "The dormant bulbs have been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

OR

- "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".
   AND
- 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
- 3. 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, United States of America

**PEQ:** Level 1 or Level 2 (see below) **Minimum Period:** 3 months

- a. Additional Declarations
  - i) "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 'Pesticide treatments for dormant bulbs' in the basic conditions within 7 days prior to freezing, cold-storage or shipment."
  - ii) "The dormant tubers have been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

# OR

- "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".
   AND
- 2. 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**
- 3. 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** 

a. Conditons for virus diseases
 <u>Additional Declaration</u>: "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, Phytophthora capsici, 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
- c. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

#### **B.** For Tissue Cultures

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

#### As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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, Pantoea ananatis, Phytophthora palmivora, Xyleborus spp.* (except *Xyleborus compressus, Xyleborus saxeseni, Xyleborus truncatus*)

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. Additional Declarations
  - "The Dracaena cuttings/plants [choose one] in this consignment have been:
  - i) 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

- ii) 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*."
- b. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

#### **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, if no treatment was done prior to export, 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.

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

Table 1 Alternate treatment for Dracaena deremensis

**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 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 *Epipremnum*", 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 capsici, Phytophthora palmivora, Ralstonia pseudosolanacearum

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 capsici* **Note:** Only applies to the following genera: *Epipremnum*, *Macadamia* and *Philodendron*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- b. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- c. Conditions for *Ralstonia pseudosolanacearum*

Note: Only applies to members of the following genus: *Epipremnum* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

OR

ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
Note: For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*".

#### B. For Tissue Cultures As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2. PLUS

a. Conditions for *Ralstonia pseudosolanacearum* **Note:** Only applies to members of the following genus: *Epipremnum* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

OR

ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".

**Note:** For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*".

#### C. For Whole Plants and Cuttings imported into a level 3A PEQ facility

**Note:** Only applies to members of the following genus: *Epipremnum* **Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

#### **PEQ:** Level 3A **Minimum Period:** 3 months

a. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- b. Conditions for *Ralstonia pseduosolanacearum* Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Epipremnum*".

#### D. For Tissue cultures imported into a level 3A PEQ facility

**Note:** Only applies to members of the following genus: *Epipremnum* **Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

#### As per section 2.2.2.4, an import permit is required PEQ: Level 3A Minimum Period: 3 months

a. Conditions for *Ralstonia pseduosolanacearum* Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Epipremnum*".

# Inspection, Testing and Treatment Requirements for Epipremnum

ORGANISM	MPI-ACCEPTED METHODS	Comments
Bacteria		
Ralstonia pseudosolanacearum	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective media <b>OR</b> PCR	Applies to <i>Epipremnum</i> whole plants, cuttings, and tissue culture imported into a level 3A PEQ facility

**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, United States of America.

**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. Conditions for Pseudomonas syringae pv. eriobotryae

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Pseudomonas syringae* pv. *eriobotryae* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

OR

ii) "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, Chrysoporthe cubensis, Endothia havanensis, Mycosphaerella parva, Phellinus noxius, Phytophthora ramorum, 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 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 noxius* (section 2.2.1.13)

#### **B.** For Tissue Cultures

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

- 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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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 transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

# OPTION 2: As per section 2.2.2.4, an import permit is required PEQ: Level 2 Tissue culture laboratory Minimum Period: 4 weeks i) The cultures containers are not to be opened during the quarantine period.

**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, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

**Quarantine Pests:** *Phellinus noxius, Phytophthora palmivora, 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. Conditions for *Phytophthora palmivora* **Note:** Only applies to the members of the following genus: *Syzygium*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- d. Conditions for *Puccinia psidii* s.l. complex
   <u>Additional Declaration</u>: "*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** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

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 <u>6 months in a Level 2 PEQ</u> <u>greenhouse</u>, for tissue cultures from countries <u>not</u> 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:**

#### As per section 2.2.2.4, an import permit is required

PEQ: Level 2 Tissue culture laboratory

#### Minimum Period: 4 weeks

i) The cultures containers are not to be opened during the quarantine period.

**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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Conditions for Uredinales

<u>Additional Declaration</u>: "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**

 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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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 Whole Plants and Cuttings PEQ: Level 2 Minimum Period: 3 months
  - a. 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".

b. Special Condition

On arrival in New Zealand the plants are to be treated, under the supervision of an Inspector, at an 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, United States of America.

**Quarantine Pests:** Ceratocystis fimbriata, Cronartium quercuum, Phytophthora ramorum, Tortricidae, Xylella fastidiosa

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 *Fagus* genus

#### **B. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

**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, United States of America.

**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. Conditions for Cryphonectria parasitica

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) *"Cryphonectria parasitica* is not known to occur in \_\_\_\_\_ [the country or state where the plants/cuttings were grown]".

#### **OR**, for cuttings only:

ii) "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:

- iii)"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** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

- 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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, 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 *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, Phytophthora capsici, Phytophthora palmivora, Ralstonia pseudosolanacearum, 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 *Phellinus noxius* (section 2.2.1.13)
- c. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- d. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- e. Conditions for Ralstonia pseudosolanacearum

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

#### OR

- ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
  Note: For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: 'The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*'.
- f. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- g. Conditions for Uredo ficina

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Uredo ficina* is not known to occur in \_\_\_\_\_ [the country or state where the plants were grown]".

OR

ii) "The *Ficus* spp. has been sourced from a 'pest free place of production', free from *Uredo ficina*"

#### **B.** For Tissue Cultures

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

#### As per section 2.2.2.4, an import permit is required PEQ: Level 2 Minimum Period: 3 months

- a. Conditions for *Ralstonia pseudosolanacearum* One of the following Additional Declarations must be endorsed on the phytosanitary certificate:
  - i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

#### OR

- ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
  Note: For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: 'The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*'.
- b. Conditions for *Xylella fastidiosa* (section 2.2.2.5)
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for Uredo ficina

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Uredo ficina* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

OR

ii) "The *Ficus* spp. has been sourced from a 'pest free place of production', free from *Uredo ficina*".

#### C. For Whole Plants and Cuttings imported into a level 3A PEQ facility

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

#### **PEQ**: Level 3A

#### 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 Phellinus noxius (section 2.2.1.13)
- c. Conditions for Phytophthora capsici

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- d. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

e. Conditions for Ralstonia pseudosolanacearum

Growing season inspection in PEQ for symptom expression AND plating on selective media OR PCR using DNA from the plant stem

- f. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- g. Conditions for Uredo ficina

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Uredo ficina* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

#### OR

ii) "The *Ficus* spp. has been sourced from a 'pest free place of production', free from *Uredo ficina*"

#### D. For Tissue Cultures imported into a level 3A PEQ facility

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

#### As per section 2.2.2.4, an import permit is required PEQ: Level 3A Minimum Period: 3 months

- a. Conditions for Ralstonia pseudosolanacearum
- b. Growing season inspection in PEQ for symptom expression AND plating on selective media OR PCR using DNA from the plant stemConditions for *Xylella fastidiosa* (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

c. Conditions for Uredo ficina

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Uredo ficina* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

#### OR

ii) "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-approved facilities (quarantine stations)

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Fortunella*, the approved 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 approved facility as specified in the agreement between MPI and the approved facility operator. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

#### (iii) <u>Phytosanitary requirements</u>

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 an MPIapproved facility

AND

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

#### (iv) Additional declarations to the phytosanitary certificate

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

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

"The Fortunella cuttings in this consignment have been:

inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by 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 approved facility as required in the agreement between MPI and the approved facility operator.

AND

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

#### (v) *Post-entry quarantine*

**PEQ**: Level 2. Plants must be held at 18-25°C throughout the quarantine period. **Ouarantine 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/tests 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-approved 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 approved 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-approved 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-approved facilities

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Fortunella*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Fortunella*. (i) *Documentation* 

# (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) <u>Pest proof container and growing media for tissue culture</u>

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 approved facility as specified in the arrangement between MPI and the approved 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 an MPIapproved facility and,

AND

held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the approved 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 approved facility as specified in the agreement between MPI and the approved facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved 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-approved 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) <u>Pest proof container and growing media for tissue culture</u>

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-approved 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 Scolvtidae Salagena sp. Xylosandrus germanus alnus ambrosia beetle Diptera **Cecidomviidae** leafcurling midge Contarinia citri Contarinia okadai citrus flower gall midge Trisopsis sp. Chamaemviidae 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 coreid bug Anoplocnemis curvipes Leptoglossus membranaceus coreid bug Mictis profana crusader bug Paradasynus spinosus squash bug Veneza phyllopus leaf-footed bug Lygaeidae Nvsius 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 whiteflies Aleurocanthus spp. Aleurocanthus woglumi citrus blackfly Aleurodicus dispersus spiralling whitefly Marlatt whitefly Aleurolobus marlatti

Aleuroplatus sp. Aleurothrixus floccosus Aleurotuba jelinekii Aleurotuberculatus aucubae Bemisia citricola Dialeurodes citri Dialeurodes citrifolii *Dialeurolonga* sp. Parabemisia myricae Siphoninus phillyreae Aphididae Aphis fabae Aulacorthum magnoliae Cicadellidae Asymmetrasca decedens *Circulifer opacipennis* Circulifer tenellus Cuerna costalis Edwardsiana flavescens Empoasca bodenheimeri Empoasca citrusa Empoasca decipiens Empoasca distinguenda Empoasca fabae Empoasca onukii Homalodisca coagulata Homalodisca lacerta Jacobiasca lybica Neoaliturus haematoceps Penthimiola bella Scaphytopius nitridus Cicadidae Cryptotympana facialis Meimuna opalifera Coccidae Ceroplastes floridensis Ceroplastes japonicus Ceroplastes rubens Ceroplastes rusci Coccus celatus Coccus pseudomagnoliarum Coccus viridis Cribrolecanium andersoni Gascardia brevicauda Protopulvinaria pyriformis Pulvinaria aethiopica Pulvinaria aurantii Pulvinaria cellulosa Saissetia citricola Saissetia somereni Dactylopiidae Dactylopius filamentosis Dactylopius vastator Diaspididae Aonidiella citrina Chrysomphalus aonidum Chrysomphalus bifasciculatus Chrysomphalus dictyospermi Chrysomphalus pinnulifera Ischnaspis longirostris

whitefly woolly whitefly aucuba whitefly citrus whitefly cloudywinged whitefly Japanese bayberry whitefly phillyrea whitefly bean aphid Japanese elder aphid leafhopper beet leafhopper leafhopper leafhopper green citrus leafhopper green leafhopper potato leafhopper tea green leafhopper glassy-winged sharpshooter cotton jassid leafhopper citrus leafhopper leafhopper black cicada elongate cicada Florida wax scale pink wax scale red wax scale fig wax scale citricola scale green scale white powdery scale white waxy scale pyriform scale soft green scale citrus cottony scale pulvinaria scale citrus string cottony scale vellow scale Florida red scale brown scale dictyospermum scale false purple scale

black thread scale

Lepidosaphes beckii Lepidosaphes gloverii Parlatoria ziziphi Pseudaonidia duplex Selenaspidus articulatus Unaspis citri Unaspis yanonensis Flatidae Colgar peracuta Geisha distinctissima Lawana conspersa Metcalfa pruinosa Fulgoridae Anzora unicolor Margarodidae Drosicha howardi Icerva sevchellarum Ortheziidae Nipponorthezia ardisiae Pseudococcidae Allococcus spp. Ferrisia consobrina Ferrisia virgata Nipaecoccus vastator Nipaecoccus viridis Paracoccus burnerae Planococcus kraunhiae Planococcus lilacinus Planococcus minor Pseudococcus citriculus Pseudococcus commonus Pseudococcus filamentosus Rastrococcus spinosus Rhizoecus kondonis Psyllidae Diaphorina citri Trioza ervtreae [vector] 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]

purple scale Glover scale black parlatoria scale camphor scale West Indian red scale citrus snow scale Japanese citrus scale

green broad-winged planthopper green flatid planthopper planthopper

persimmon mealybug Seychelles scale

ensign scale

mealybug striped mealybug nipa mealybug hibiscus mealybug spherical mealybug Japanese wisteria mealybug citrus mealybug passionvine mealybug smaller citrus mealybug

mealybug mealybug Kondo mealybug

citrus psyllid citrus psyllid

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]	-
Metaphycus helvolus [Animals Biosecurity]	parasitic wasp
Metaphycus helvous [Animals Biosecurity] Metaphycus luteolus [Animals Biosecurity]	-
Metaphycus tateotus [Animals Biosecurity] Metaphycus stanleyi [Animals Biosecurity]	-
Metaphycus statueyt [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	5 5
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 Ta harman alkinas (andi [Animala Diagonatita]	-
<i>Technomyrmex albipes foreli</i> [Animals Biosecurity] <b>Mymaridae</b>	-
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] Isoptera Termitidae Odontotermes lokanandi Lepidoptera Arctiidae Lemyra imparilis Blastobasidae Holcocera icervaeella Cosmopterigidae Pyroderces rileyi Geometridae Anacamptodes fragilaria Ascotis selenaria reciprocaria Gymnoscelis rufifasciata Hyposidra talaca Gracillariidae Phyllocnistis citrella Hepialidae Endoclita excrescens Endoclita sinensis Lycaenidae Virachola isocrates Lymantriidae Orgyia vetusta Metarbelidae Indarbela tetraonis Noctuidae Arcte coerula Eudocima fullonia Helicoverpa assulta Helicoverpa punctigera Tiracola plagiata Xylomyges curialis Nymphalidae Charaxes jasius Oecophoridae Psorosticha melanocrepida Psorosticha zizyphi Stathmopoda auriferella Papilionidae Papilio aegeus aegeus Papilio anactus Papilio cresphontes Papilio dardanus cenea Papilio demodocus Papilio demoleus demoleus Papilio helenus nicconicolens Papilio machaon asiatica Papilio memnon Papilio memnon thunbergii Papilio nireus lyaeus Papilio polytes polytes Papilio protenor demetrius Papilio xuthus Papilio zelicaon Psychidae Eumeta hardenbergi

paper wasps termite mulberry tiger moth pink scavenger caterpillar koa haole looper citrus looper geometrid moth citrus leafminer Japanese swift moth pomegranate butterfly western tussock moth stem borer fruit-piercing moth fruit-piercing moth cape gooseberry budworm oriental tobacco budworm banana fruit caterpillar noctuid moth nymphalid butterfly citrus leafroller citrus leafroller apple heliodinid small citrus butterfly orange dog orange dog citrus swallowtail citrus swallowtail anise swallowtail

Eumeta japonica Eumeta minuscula tea bagworm Eumeta moddermanni Hyalarcta huebneri Pyralidae Apomyelois ceratoniae Tortricidae Adoxophyes sp. Amorbia cuneana Archips argyrospilus Archips machlopis Archips occidentalis Archips rosanus Argyrotaenia citrana Cacoecimorpha pronubana Cryptophlebia batrachopa Cryptophlebia leucotreta Homona magnanima Isotenes miserana Platynota stultana Tortrix capensana Yponomeutidae Prays citri Prays parilis Neuroptera Chrysopidae Chrysopa oculata [Animals Biosecurity] Coniopterygidae Coniopteryx vicina [Animals Biosecurity] Conwentzia barretti [Animals Biosecurity] Orthoptera Acrididae Zonocerus elegans Grvllidae Ornebius kanetataki cricket Tettigoniidae *Caedicia* sp. Holochlora japonica Microcentrum retinerve Scudderia furcata **Psocoptera** Archipsocidae Archipsocus sp. Thysanoptera Aeolothripidae Franklinothrips vespiformis [Animals Biosecurity] Thripidae Chaetanaphothrips orchidii Leptothrips mali Scirtothrips aurantii Scirtothrips citri Scirtothrips dorsalis Scirtothrips mangiferae Scolothrips sexmaculatus [Animals Biosecurity] Taeniothrips kellyanus Taeniothrips sp. Thrips coloratus thrips Thrips flavus Thrips palmi **Unknown Insecta** 

leaf case moth date pyralid leafroller fruit tree leafroller leafroller leafroller rose leafroller orange tortrix carnation leafroller false codling moth oriental tea tortrix orange fruitborer omnivorous leafroller tortricid moth citrus flower moth citrus flower moth elegant grasshopper Japanese broadwinged katydid smaller angular-winged katydid fork-tailed bush katydid bark louse banana rust thrips black hunter thrips citrus thrips citrus thrips chilli thrips mango thrips

flower thrips palm thrips

#### **Unknown Insecta**

Cosmophyllum pallidulum

#### N

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]	-
<i>Iphiseius degenerans</i> [Animals Biosecurity]	predatory mite
<i>Typhlodromus athiasae</i> [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	1 .1 .1 .
Tuckerella knorri	hawthorn spider mite
Spider	
Arachnida	
Araneae	
Clubionidae	
Cheiracanthium mildei [Animals Biosecurity]	-
Theridiidae	
Theridion sp. [Animals Biosecurity]	-
Mallaraa	

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# Mollusc

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	promopolo camer
Elsinoaceae	
Elsinoe australis	sweet orange scab
Capnodiaceae	street orange seas
Capnodium citri	sooty mould
Didymosphaeriaceae	soory mould
Didymosphaeria sp.	
Mycosphaerellaceae	
Guignardia citricarpa (anamorph Phyllosticta	citrus black spot
<i>citricarpa</i> ) [black spot strain]	entrus entrem spor
<i>Mycosphaerella citri</i> (anamorph <i>Stenella citri-grisea</i> )	rind blotch
Mycosphaerella horii	greasy spot
Patellariales	grousy spor
Patellariaceae	
Rhytidhysteron rufulum	
Saccharomycetales	
Saccharomycetaceae	
Debaryomyces hansenii	
Galactomyces citri-aurantii (anamorph Geotrichum	sour rot
citri-aurantii)	sourrot
Basidiomycota: Agaricomycetes	
Hymenochaetales	
Hymenochaetaceae	
Phellinus noxius	brown root rot
Basidiomycota: Basidiomycetes	010w11100t10t
Boletales	
Coniophoraceae	
Coniophora eremophila	brown wood rot
Basidiomycota: Teliomycetes	
Septobasidiales	
Septobasidiaceae	
Septobasidium pseudopedicellatum	felt fungus
Mitosporic Fungi	Telt Tuligus
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	
Sphaceloma fawcettii var. scabiosa Mitesporie Funci (Coolomyeetes)	-
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales Sphaeroideasa	
Sphaerioidaceae	
Macrophoma mantegazziana	-
Phoma erratica var. mikan	
Phoma tracheiphila	mal secco
Phomopsis sp.	rot

Septoria spp.	-
Sphaeropsis tumefaciens	stem gall
Unknown Coelomycetes	Stern Ban
Unknown Coelomycetes	
Aschersonia placenta [Animals Biosecurity]	
Gloeosporium foliicolum	fruit rot
Mitosporic Fungi (Hyphomycetes)	Huit fot
Hyphomycetales	
Dematiaceae	
Alternaria limicola	
Alternaria pellucida	-
Cercospora microsora	
	-
Phaeoramularia angolensis	cercospora spot
Stemphylium rosarium Ulocladium obovoideum	 ulocladium rot
	ulociadium rot
Unknown Hyphomycetes	
Unknown Hyphomycetes	
Aureobasidium sp.	-
Hirsutella thompsonii [Animals Biosecurity]	
Isaria sp. [Animals Biosecurity]	-
Oidium tingitaninum	powdery mildew
Sporobolomyces roseus	
<i>Stenella</i> sp.	
Zygomycota: Zygomycetes	
Glomales	
Glomaceae	
Glomus etunicatum [Animals Biosecurity]	
Mucorales	
Syncephalastraceae	
Syncephalastrum racemosum	
De standard	
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 satsuma dwarf strain] xyloporosis viroid yellow vein clearing of lemon	- - - - - - -
Phytoplasma	
<i>Candidatus</i> Phytoplasma aurantifolia	witches' broom phytoplasma
rubbery wood	-
Disease of unknown aetiology Australian citrus dieback blind pocket bud union disease citrus blight disease citrus fatal yellows citrus 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-ACCEPTED METHODS	
Fungi	Country freedom OR growing season inspection for symptom expression.
Bacteria	Country needoni on growing season inspection for symptom expression.
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 $32^{\circ}$ C. Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot temperature (> $30^{\circ}$ C) and incubate cultures at $32^{\circ}$ C.
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR
axonopodis pv. citri	suitable citrus indicator.
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR
campestris pv.	suitable citrus indicator.
aurantifolii	
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR
<i>campestris</i> pv. <i>citrumelo</i>	suitable citrus indicator.
Xylella fastidiosa	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
Yvlalla fastidiosa pv	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus
<i>Xylella fastidiosa</i> pv. <i>citri</i>	indicator.
	Indicator.
Viruses	
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures
	temperatures 18 to 25°C.
citrus infectious	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow
variegation ilarvirus	indicators at cool temperatures 18 to 25°C.
citrus infectious	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow
variegation ilarvirus	indicators at cool temperatures 18 to 25°C.
[crinkly leaf strain]	
citrus leaf rugose	Country freedom OR graft inoculated Mexican lime or sour orange. Grow
ilarvirus	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	Country freedom OR graft inoculated sweet orange. Grow indicators at cool
rhabdovirus	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	Country freedom OR graft inoculated Rusk citrange, rough lemon, Citrus excelsa,
capillovirus	citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and Citrus
closterovirus [strains not	excelsa. Grow indicators at cool temperatures 18 to 25°C.
in New Zealand]	
citrus yellow mosaic	Country freedom OR graft inoculated sweet orange, sour orange and citron.
badnavirus	
citrus yellow mottle	Country freedom OR other suitable test.
virus	
Indian citrus mosaic	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.
badnavirus	
navel orange infectious	Country freedom OR graft inoculated Satsums. Grow indicators at cool
mottling virus	temperatures 18 to 25°C.
satsuma dwarf	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures
	• • •
nepovirus	18 to 25°C.
satsuma dwarf	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures
nepovirus [Natsudaidai	18 to 25°C.
dwarf strain]	

ORGANISM TYPES	MPI-ACCEPTED METHODS	
yellow vein clearing of	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators	
lemon	at cool temperatures 18 to 25°C.	
Viroids		
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-	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow	
IV)	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.	
Diseases of unknown ae	tiology	
Australian citrus	Country freedom OR other suitable test	
dieback		
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	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth	
disease	indicators at cool temperatures 18 to 25°C.	
citrus sunken vein	Country freedom OR other suitable test.	
disease		
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.	
0 1 1	Grow indicators at cool temperatures 18 to 25°C.	
Gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot	
Kassala disease	temperature 27 to 32°C.	
lemon sieve tube	Country freedom, cuttings collected from kassala free area.	
necrosis	Country freedom OR other suitable test.	
shell bark of lemons	Country freedom OR other suitable test.	
zonate chlorosis	Country freedom OK other suitable test. Country freedom, cuttings collected from kassala free area.	
	Country meedoni, eutings concetter nom kassala nee area.	
Phytoplasmas	Country freedom OP graft incoulated lime. Grow indicators at appl temperatures 19	
<i>Candidatus</i> phytoplasma aurantifolia	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18 to 25°C.	
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot	
	temperature 27 to 32°C.	
	nted as equivalence to a treatment	

\* 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-approved facilities, or into Level 3B post entry quarantine from non-approved facilities.

#### 2. Pests of *Fragaria*

Refer to the pest list.

## **3.** Entry conditions for:

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

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Fragaria*, the approved 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-approved facility].
   AND
- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved 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-approved facility].
   AND
- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved 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 approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests are required.

#### 3.2 Fragaria cuttings and tissue culture from non-approved 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) <u>Phytosanitary requirements</u>

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 approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests are required.

# Pest List for Fragaria

#### **REGULATED PESTS (actionable)**

Insect Insecta Coleoptera Attelabidae Rhynchites germanicus Bruchidae Zabrotes arenarius Cantharidae Chauliognathus lugubris Carabidae Calathus fuscipes Harpalus affinis Harpalus rufipes Nebria brevicollis Pterostichus cupreus Pterostichus madidus Pterostichus melanarius Chrysomelidae Altica caerulescens Chaetocnema concinna Colaspis flavida Galeruca tanaceti Galerucella grisescens Galerucella tenella Haltica corrusca Haltica pagana Paria fragariae Systena frontalis Curculionidae Anthonomus rubi Anthonomus signatus Apirocalus spp. Barypeithes pellucidus Cleonus kirbyi Conotrachelus nenuphar Donus salviae Dyslobus decoratus Dyslobus ursinus Dyslobus wilcoxi Geoderces spp. Haplidia etrusca Hypera brunneipennis Myllocerus undecimpustulatus Nemocestes fragariae Nemocestes incomptus Nemocestes longulus Nemocestes sordidus Orthorhinus aethops Otiorhynchus armatus Otiorhynchus clavipes Otiorhynchus cribricollis Otiorhynchus meridionalis Otiorhynchus rotundatus Otiorhynchus rugifrons Otiorhynchus singularis

strawberry rhynchites

strawberry weevil

#### soldier beetle

ground beetle strawberry seed beetle strawberry seed beetle common black ground beetle strawberry ground beetle strawberry ground beetle strawberry ground beetle

leaf beetle leaf feeding beetle grape colaspis strawberry leaf beetle strawberry leaf beetle fles beetle flea beetle strawberry rootworm flea beetle

strawberry blossom weevil strawberry bud weevil weevils strawberry weevil radish weevil plum weevil strawberry weevil decorated strawberry root weevil western strawberry root weevil Lacomb strawberry root weevil root weevil root weevil Egyptian alfalfa weevil grey weevil strawberry root weevil woods weevil strawberry root weevil strawberry root weevil weevil strawberry root weevil red-legged weevil cribrate weevil strawberry root weevil strawberry root weevil strawberry root weevil strawberry root weevil

Panscopus torpidus Peritelopsis globiventris Plinthodes taeniatus Polydrusus cervinus Polydrusus sericeus Rhadinosomus lacordairei Rhinaria perdix Rhynchites germanicus Sciaphilus asperatus Sciopithes obscurus Sitona hispidulus Strophomorphus porcellus Thricolepis inornata Trigonoscuta pilosa Tyloderma fragariae Elateridae Agriotes spp. (species not in New Zealand) Nitidulidae Carpophilus fumatus *Glischrochilus hortensis* Lobiopa insularis Stelidota spp. Stelidota geminata Scarabaeidae Anoplognathus porosus Cetonia spp. Cyclocephala borealis Hoplia spp. Lepidiota frenchi Melolontha melolontha Metanastes vulgivagus Phyllopertha horticola Phyllophaga decimlineata Phyllophaga perversa Popillia japonica Repsimus aeneus Rhopaea magnicornis Serica spp. Sericesthis geminata Sericesthis nigrolineata Scolytidae Poecilips cardamomi Silphidae Heterosilpha aenescens Collembola **Sminthuridae** Bourletiella arvalis dorsobscura Sminthurus multidentatus Diptera Agromyzidae Agromyza fragariae Agromyza spiraeae Tipulidae Tipula spp Hemiptera Anthocoridae Orius laevigatus Lygaeidae Euander lacertosus Nysius clevelandensis

root weevil grey weevil root weevil weevil green leaf weevil thin strawberry weevil strawberry weevil strawberry rhynchites strawberry root weevil obscure root weevil root weevil weevil root weevil root weevil strawberry crown borer click beetles sap beetle sap beetle strawberry borer sap beetles strawberry sap beetle Christmas beetle chafers northern masked chafer white grubs French's cane grub cockchafer black beetle garden chafer ten-lined June beetle western ten-lined June beetle Japanese beetle white grub large pasture scarab white grubs priunose scarab dusky pasture scarab bark beetle carrion beetle garden springtail garden springtail strawberry leafminer rose leafminer leatherjackets plant bug lygaeid bug grey cluster bug

Nysius spp. Nysius vinitor Miridae Calocoris hobartensis Lygocoris pabulinus Lygus elisus Lygus hesperus Lygus lineolaris Lygus rugulipennis Plagiognathus arbustorum Plagiognathus chrysanthemi Scolopostethus spp. Pentatomidae Acrosternum hilare Dolycoris baccarum **Pvrrhocoridae** Dindymus versicolor Homoptera Alevrodidae Aleyrodes lonicerae Trialeurodes fernaldi Trialeurodes packardi Trialeurodes ruborum Aphididae Acyrthosiphon malvae rogersii Amphorophora agathonica Aphis fabae Aphis forbesi Aphis gossypii [vector] Aphis rubifolii Aulacorthum solani [vector] Chaetosiphon jacobi Chaetosiphon minus Chaetosiphon tetrarhodum [vector] Chaetosiphon thomasi Fimbriaphis fimbriata Fimbriaphis wakibae Macrosiphum pelargonii *Macrosiphum rosae* [vector] Myzaphis rosarum [vector] Myzus ascalonicus [vector] Myzus ornatus [vector] Myzus persicae [vector] Rhodobium porosum Aphrophoridae Aphrophora alni Aphrophora permutata Cercopidae Cercopis vulnerata Emelyanoviana mollicula Evacanthus interruptus Philaenus leucophthalmus Cicadellidae Aphrodes bicinctus Apogonalia grossa Coelidia olitoria Edwardsiana spp. Empoasca fabae Erythroneura elegantula Euscelis spp.

bugs Rutherglen bug capsid common green capsid pale legume bug tarnished plant bug tarnished plant bug tarnished plant bug stink bug stink bug plant bugs green stink bug stink bug harlequin bug strawberry whitefly whitefly strawberry whitefly whitefly strawberry aphid strawberry aphid bean aphid strawberry root aphid cotton aphid raspberry aphid foxglove aphid strawberry aphid lesser strawberry aphid strawberry aphid strawberry aphid rose aphid rose aphid rose aphid rose aphid lesser rose aphid shallot aphid ornate aphid green peach aphid aphid spittlebug rhubarb spittlebug red and black froghopper spittlebug spittlebug spittlebug strawberry leafhopper leafhopper leafhopper leafhoppers potato leafhopper western grape leafhopper leafhoppers

Macrosteles spp. Scaphytopius acutus Zygina schneideri Pseudococcidae Chorizococcus arecae Dysmicoccus brevipes Planococcus citri Rhizoecus kondonis **Hymenoptera** Tenthredinidae Allantus calceatus Allantus cinctus Cladius pectinicornis Lepidoptera Gelechiidae Aristotelia fragariae Compsolechia fragariella Geometridae Ascotis selenaria Hepialidae Hepialus lupulinus Noctuidae Agrotis spp. (species not in New Zealand) Agrotis munda Agrotis segetum Amphipoea interoceanica Helicoverpa punctigera Helicoverpa zea Hydraecia interoceanica Noctua pronuba Orthosia hibisci Peridroma saucia Phlogophora meticulosa Spodoptera exigua Spodoptera sunia Xestia c-nigrum Psychidae Hyalarcta huebneri Pyralidae Loxostege spp. Udea rubigalis Sesiidae Synanthedon bibionipennis Tortricidae Acleris comariana Ancylis comptana Ancylis fragariae Argyrotaenia citrana Cacoecimorpha pronubana Choristoneura lafauryana Choristoneura rosaceana Claremontia confusa Clepsis busckana Clepsis spectrana Cnephasia asseclana Cnephasia longana Cnephasia stephensiana Compsolechia fragariella Cryptoptila immersana Epiphyas spp.

leafhoppers leafhopper leafhopper mealybug pineapple mealybug citrus mealybug Kondo mealybug sawfly curled rose sawfly antler sawfly strawberry crown miner western strawberry leafroller mugwort looper swift moth cutworms brown cutworm turnip moth strawberry cutworm oriental tobacco budworm bollworm noctuid moth large yellow underwing speckled green fruitworm pearly underwing moth angleshades moth lesser armyworm cluster caterpillar spotted cutworm leaf case moth pyralid moths celery leaftier strawberry crown moth strawberry tortrix moth strawberry leafroller strawberry leafroller orange tortrix carnation leafroller strawberry leafroller oblique-banded leafroller leafroller cyclamen leafroller straw coloured tortrix leafroller omnivorous leaftier leaftier western strawberry leafroller ivy leafroller leafrollers

Lozotaenia forsterana Olethreutes lacunana Olethreutes olivaceana Pandemis dumetana Platynota stultana Ptycholoma peritana Sparganothis sulfureana Orthoptera Acrididae Phaulacridium vittatum Gryllotalpidae Gryllotalpa africana Gryllotalpa gryllotalpa Scapteriscus acletus Scapteriscus vicinus Pyrgomorphidae Atractomorpha crenaticeps Thysanoptera Thripidae Scirtothrips dorsalis Scolothrips sexmaculatus Thrips atratus Thrips major Mites Arachnida Acarina Diptilomiopidae Diptacus fragarifoliae Tetranychidae Tetranychus kanzawai Tetranychus lobustus Tetranychus neocalendonicus Tetranychus pacificus Nematodes Adenophorea Dorvlaimida Longidoridae Longidorus elongatus [vector] Longidorus sylphus Paralongidorus maximus Xiphinema americanum [Vector] Xiphinema chambersi Xiphinema diversicaudatum [vector] Secernentea Tylenchida Aphelenchoididae Aphelenchoides besseyi Belonolaimidae Belonolaimus gracilis Criconematidae Criconemoides curvatum Criconemoides lobatum Dolichodoridae Tylenchorhynchus claytoni Heteroderidae Heterodera spp. Hoplolaimidae Hoplolaimus spp.

leafroller fruit tree tortrix fruit tree tortrix fruit tree tortrix omnivorous leafroller garden tortrix blueberry leafroller wingless grasshopper African mole cricket mole cricket southern mole cricket tawny mole cricket grasshopper chilli thrips carnation thrips rose thrips false spider mite kanzawaii mite strawberry spider mite Mexican spider mite Pacific spider mite needle nematode needle nematode dagger nematode dagger nematode dagger nematode rice white-tip nematode sting nematode ring nematode ring nematode tobacco stunt nematode cyst nematode 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
1 leuroionia fiavipes	mmpede
Molluscs	
Gastropoda	
Stylommatophora	
Helicidae	
Trichia striolata	strawberry snail
Fungi	
Ascomycota	
Dothideales	
Mycosphaerellaceae Mycosphaerellaceae	menula leaf an at
Mycosphaerella louisianae Eurotiales	purple leaf spot
Trichocomaceae	have a shlaway not
Byssochlamys fulva	byssochlamys rot
Hypocreales Hypocreaceae	
	cabizonarma fruit rot
Schizoparme straminea (anamorph Coniella castaneicola)	schizoparme fruit rot
Leotiales	
Leotiaceae	
Discohainesia oenotherae (anamorph Hainesia lythri)	leaf spot
Basidiomycota: Basidiomycetes	lear spor
Agaricales	
Tricholomataceae	
Armillaria bulbosa	armillaria root rot
Armillaria mellea (anamorph Rhizomorpha	armillaria root rot
subcorticalis)	
Armillaria tabescens	armillaria root rot
Ceratobasidiales	
Ceratobasidiaceae	
Ceratobasidium anceps (anamorph Sclerotium	leaf rot
deciduum)	
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)	fruit und root fot
Sphaeropsidales	
Leptostromataceae	
Kabatia fragariae	leaf spot
Sphaerioidaceae	ical spot
Coniella fragariae	flower spot
	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	strawberry anthracnose
gloeosporioides)	
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	1 0
Tuberculariaceae	
Fusarium oxysporum f. sp. fragariae	stub wilt
Oomycota	
Peronosporales	
Peronosporaceae	
Peronospora fragariae	downy mildew
Phytophthora capsici	fruit rot of peppers
Pythiales	man for or peppers
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	1001101
Zygomycota: Zygomycetes Mucorales	
Mucoraceae	milaor rot
Mucor recurvus	mucor rot
Rhizopus spp.	

#### Bacteria

Erwinia pyrifoliae Ralstonia solanacearum (Race 2) Strawberry marginal chlorosis ['Candidatus phlomobacter fragariae'] Strawberry rickettsia yellows Xanthomonas arboricola pv. fragariae Xanthomonas fragariae Xylella fastidiosa\*

#### 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 bacterial leaf blight angular leaf spot Pierce's disease

# Inspection, Testing and Treatment Requirements for Fragaria

ORGANISM TYPES	MPI-ACCEPTED METHODS
Mites	Visual inspection AND approved miticide treatments as described in
	section 2.2.1.6 of 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
Tungi	upon arrival in the post entry quarantine facility.
	Growing season inspection in PEQ for symptom expression
Oomycetes	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes
Somycetes	upon arrival in the post entry quarantine facility.
	Growing season inspection in PEQ for symptom expression
Bacteria (and diseases caused by	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes
bacteria-like organisms)	upon arrival in the post entry quarantine facility.
Erwinia pyrifoliae	Growing season inspection for symptom expression <b>AND</b> PCR
Ralstonia solanacearum (Race 2)	Growing season inspection for symptom expression Arth Terr Growing season inspection for symptom expression.
Strawberry marginal chlorosis	Growing season inspection for symptom expression. Growing season inspection for symptom expression AND PCR
<i>('Candidatus</i> phlomobacter	Growing season inspection for symptom expression Arto I CK
fragariae')	
Strawberry rickettsia yellows	Growing season inspection for symptom expression
Xanthomonas arboricola pv.	Growing season inspection for symptom expression AND PCR
fragariae	
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	Herbaceous indicators (Chenopodium quinoa and Cucumis sativus)
[strains not in New Zealand]	
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	Herbaceous indicators (Chenopodium quinoa and Cucumis sativus)
[strains not in New Zealand]	AND ELISA or PCR
Strawberry mild yellow edge-	Graft inoculation (2 indicators; Fragaria vesca cl. UC4 or UC5, or cv.
associated virus	Alpine
Strawberry pallidosis associated virus	Graft inoculation (Fragaria virginiana cl. UC10 or UC11)
Strawberry pseudo mild yellow edge	Graft inoculation (Fragaria vesca cl.UC4 or cv. Alpine. or Fragaria
virus	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	Herbaceous indicators (Chenopodium quinoa and Cucumis sativus)
New Zealand]	AND ELISA or PCR
Tobacco streak virus [strains not in	Herbaceous indicators (Chenopodium quinoa
New Zealand]	and Cucumis sativus)
Tomato bushy stunt virus	Herbaceous indicator (Chenopodium quinoa)
Tomato ringspot virus	Herbaceous indicators ( <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i> ) AND ELISA or PCR
Phytoplasmas	Growing season inspection AND nested PCR or real time PCR
Diseases of unknown aetiology	
<b>Diseases of unknown aetiology</b> Strawberry feather leaf disease	Graft inoculation (Fragaria vesca cl. UC1 or UC4, or 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 greenhouse approved to facility standard PEQ.STD Post Entry Quarantine for Plants 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 18-25°C 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, United States of America:

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

#### a. Additional Declaration

i) For bulbs produced under an 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

ii) For bulbs NOT produced under an 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, United States of America:

OPTION 1: PEQ: Level 1

#### Minimum Period: 3 months

a. 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

## **D. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

a. Conditions for virus diseases
 <u>Additional Declaration</u>: "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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- c. Conditions for Aculops fuchsiae

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Aculops fuchsiae* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

#### OR

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

#### **B.** For Tissue Cultures

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

 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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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, United States of America.

Quarantine Pests: Chrysomyxa ledi, Microsphaera 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. Conditions for Chrysomyxa ledi and Microsphaera spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Chrysomyxa ledi* and *Microsphaera* spp. are not known to occur in \_\_\_\_\_[the country or state of where the plants were grown]".

OR

- ii) "The plants were inspected during the growing season and no *Chrysomyxa ledi* or *Microsphaera* spp. was detected".
- b. Additional Declaration
   "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.

# Gentiana

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

#### **GENERAL CONDITIONS:**

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 Declaration
 "The plants have been dipped in oxycarboxin at 1.5g a.i. per litre of water, prior to export".

**B. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **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., *Phytophthora capsici*, *Phytophthora palmivora*, *Phytophthora tentaculata* 

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 Frankliniella occidentalis and Liriomyza spp.

<u>Additional Declaration</u>: "The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

b. Conditions for *Phytophthora capsici* **Note:** Only applies to the following genus: *Gypsophila* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

c. Conditions for *Phytophthora palmivora* **Note:** Only applies to the following genus: *Gerbera* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- d. Conditions for *Phytophthora tentaculata* **Note:** Only applies to the following genus: *Gerbera*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

# OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

## OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".

## **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

a. Conditions for Puccinia gladioli

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Puccinia gladioli* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

OR

ii) "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, United States of America

OPTION 1: No import permit is required PEQ: None Cleanliness: Bulbs (corms) must be free of leafy coverings.

a. Additional Declaration

i) For bulbs produced under an 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

ii) For bulbs NOT produced under an 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, United States of America:

OPTION 1: PEQ: Level 1 Minimum Period: 3 months Cleanliness: Bulbs (corms) must be free of leafy coverings.

a. 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 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 *Glycyrrhiza*", 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

a. Conditions for Uromyces spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Uromyces* spp. are not known to occur on *Glycyrrhiza* in \_\_\_\_\_[the country or state where the plants were grown]".

#### OR

ii) "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 *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, Phymatotrichopsis omnivora, Plasmopara halstedii, Pseudomonas spp., Septoria helianthi, 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

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

#### **OPTION 1:**

i) <u>Additional Declaration</u>: "The dormant bulbs have been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

#### **OPTION 2:**

i) <u>Additional Declaration</u>: "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".

## AND

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

# Hippeastrum

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

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

Dormant bulbs Plants in tissue culture

#### 2. Pests of *Hippeastrum*

Refer to the pest list.

#### 3. Entry conditions for:

#### 3.1 Hippeastrum dormant bulbs from any country

#### (i) *Documentation*

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

#### (ii) <u>Phytosanitary requirements</u>

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/tests 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) <u>Special tissue culture media requirements</u>

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/tests are required

# Pest List for Hippeastrum

#### **REGULATED PESTS (actionable)**

Mite Arachnida Acarina Tarsonemidae Steneotarsonemus laticeps

bulb scale mite

Nematode Secernentea Tylenchida Pratylenchidae Pratylenchus coffeae Pratylenchus scribneri

coffee root lesion nematode Scribner's root lesion nematode

Fungus

Basidiomycota: Basidiomycetes Agaricales Tricholomataceae Armillaria mellea (anamorph Rhizomorpha subcorticalis)

armillaria root rot

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

#### **GENERAL CONDITIONS:**

#### Approved Countries: All

Quarantine Pests: Hoya undetermined tobamoviruses

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 *Hoya* undetermined tobamoviruses Pre-determined testing in PEQ: refer to 'Inspection, Testing and Treatment Requirements for *Hoya*'

#### **B. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

#### As per section 2.2.2.4, an import permit is required PEQ: Level 2 greenhouse Minimum Period: 3 months

a. Conditions for *Hoya* undetermined tobamoviruses Pre-determined testing in PEQ: refer to 'Inspection, Testing and Treatment Requirements for *Hoya*'

#### Inspection, Testing and Treatment Requirements for Hoya

ORGANISM	MPI-ACCEPTED METHODS	Comments
Viruses		
Hoya	Growing season inspection in PEQ for	Applies to whole plants,
undetermined	symptom expression AND RT-PCR	cuttings and tissue culture
tobamoviruses		plants

#### Notes:

1. All Hoya plants within a consignment will need to be tested for Hoya undetermined tobamoviruses.

2. Samples for the screening of *Hoya* undetermined tobamoviruses should be taken as close to the end of the PEQ period as practically possible.

3. Screening for *Hoya* undetermined tobamoviruses can be done on unbulked material or bulked samples of up to five plants.

4. If a single positive sample is detected within a consignment, the whole consignment must be either reshipped or destroyed at the expense of the importer.

# 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 alboatrum, 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*

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

As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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 *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: Phellinus noxius, Tetranychus kanzawai, 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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*

#### **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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*

#### **C. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

 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 <u>6 months in a Level 2 PEO</u> greenhouse, for tissue cultures from countries <u>not</u> 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*

#### **B. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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) <u>Documentation</u>

**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) <u>Phytosanitary requirements</u>

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/tests 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 an 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) <u>Special tissue culture media requirements</u>

The tissue culture media must not contain charcoal.

# (iii) <u>Phytosanitary requirements</u>

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/tests 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	
<i>Botryotinia convoluta</i> (anamorph <i>Botrytis convallariae</i> )	stem rot
Botryotinia polyblastis (anamorph Botrytis polyblastis)	fire disease
Sclerotinia bulborum	black slime
Basidiomycota: Basidiomycetes	UTACK SHITTE
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, United States of America.

**Quarantine Pests**: *Ceratocystis fimbriata, Erwinia nigrifluens, Erwinia quercina* pv. *rubrifaciens, Gnomonia leptostyla,* Walnut blackline, Walnut bunch/brooming disease, *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 Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

### As per section 2.2.2.4, an import permit is required 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

# Juniperus

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

### **GENERAL CONDITIONS:**

**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, United States of America.

Quarantine Pests: Chrysomyxa ledi, Microsphaera 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 Declaration
   "The plants have been dipped prior to export in propiconazole at the rate of 0.5g a.i. per litre of water."
- b. Conditions for Chrysomyxa ledi and Microsphaera spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Chrysomyxa ledi* and *Microsphaera* spp. are not known to occur in \_\_\_\_\_[the country or state of where the plants were grown]".

## OR

- ii) "The plants were inspected during the growing season and no *Chrysomyxa ledi* or *Microsphaera* spp. was detected".
- 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 *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, United States of America.

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

a. Conditions for Uredinales
 <u>Additional Declaration</u>: "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

a. 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

# C. For Dormant Bulbs from the United States of America

**No import permit is required unless the bulbs require post-entry quarantine. PEQ:** None or Level 2 (see below)

a. Additional Declarations

"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".

### b. Conditions for Phymatotrichopsis omnivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The dormant tubers have been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

OR

ii) "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".

AND

- 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 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 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) <u>Phytosanitary requirements</u>

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."

### AND

One of the following Additional Declarations for *Phytophthora capsici*:

- "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".
   OR
- "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".
   OR
- "The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

### (iv) Post-entry quarantine

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

## 3.2 Lilium dormant bulbs from any country other than 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:** 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."

# AND

One of the following Additional Declarations for *Phytophthora capsici*:

- "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".
   OR
- "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

# OR

- "The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".

# (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/tests 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 an MPI Inspector.

# 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) <u>Special tissue culture media requirements</u>

The tissue culture media must not contain charcoal.

# (iii) <u>Phytosanitary requirements</u>

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/tests are required.

# Pest List for Lilium

# **REGULATED PESTS (actionable)**

Insect	
Insecta	
Collembola	
Entomobryidae	Querin etail
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
<b>F</b>	
Fungus	
Ascomycota	
Dothideales	
Mycosphaerellaceae	hla alt not
Didymellina intermedia Museomhannlla martagonia	black rot black blotch
Mycosphaerella martagonis	DIACK DIOLCH
Basidiomycota: Basidiomycetes	
Agaricales Tricholomataceae	
	armillaria root rot
Armillaria mellea (anamorph Rhizomorpha	ammana 100t 10t
subcorticalis) Auriculariales	
Auriculariales	
	violat most not
Helicobasidium mompa Posidiomysoto: Toliomysotos	violet root rot
Basidiomycota: Teliomycetes Uredinales	
Pucciniaceae	Duct
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)	0
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
Oomycota	
Peronosporales	
Peronosporaceae	
Phytophthora capsici	Fruit rot of peppers
Tuberculariales	1 11
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	-
<i>Tobacco rattle virus</i> [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 *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 PlantsPEQ: Level 2Minimum Period: 6 months

- a. Conditions for *Phellinus noxius* (section 2.2.1.13)
- b. Conditions for *Aceria litchii* and members of the Xyloryctidae family <u>Additional Declaration</u>: "The plants were grown on a nursery that has been inspected for the presence of *Aceria litchii* and members of the Xyloryctidae family and none were found".

## **B.** For Tissue Cultures

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

# Lithocarpus densiflorus

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

### **GENERAL CONDITIONS:**

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

**Quarantine Pests:** *Ceratocystis fagacearum, Cronartium quercuum, Phytophthora ramorum,* Tortricidae

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

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

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

a. Conditions for Ceratocystis fagacearum

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Ceratocystis fagacearum* is not known to occur in \_\_\_\_\_[the country or state where the plants/cuttings were grown]".

### **OR**, for cuttings:

- ii) "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:
- iii) "The plants were inspected during the previous growing season and no *Ceratocystis* fagacearum was detected".
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. 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

### **B.** For Tissue Cultures

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

# Lophophora williamsii

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

## **GENERAL CONDITIONS:**

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 or Level 3A post entry quarantine from MPI-approved facilities, or into Level 3B post entry quarantine from non-approved facilities.

## 2. Pests of *Malus*

Refer to the pest list.

# 3. Entry conditions for:

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

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Malus*, the approved 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-approved facility].
   AND
- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved 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-approved facility].
   AND
- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved 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 or Level 3A greenhouse facility approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

# Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown:

(a) for a minimum period of six months (of active continuous growth) in a Level 2 post-entry quarantine greenhouse, following a minimum period of two growing seasons in an offshore MPI-approved facility. Plants will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer.

### OR

(b) for a minimum period of 12 months of active growth (including at least one period of six months of active continuous growth) in a Level 3A post-entry quarantine greenhouse, following a minimum period of one growing season in an offshore MPI-approved facility. Plants will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer.

## Special requirements for plants imported into a Level 3A quarantine facility:

- Plants must be irrigated using a method which prevents water coming into contact with plant foliage (such as drip irrigation). Overhead irrigation must not be used.
- Contingency plans must be developed to identify actions that will be taken to contain the propagules of any fungal or oomycete disease organisms in the event of disease symptoms becoming evident during the quarantine period. These plans must be recorded in the facility operating manual.

For tissue cultures, the post-entry quarantine period begins when tissue cultures are deflasked into the PEQ greenhouse. The total quarantine period in New Zealand is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### Guidance:

The import permit will identify the length of the quarantine period and level of post-entry quarantine for plants imported from an offshore MPI-approved facility. This will depend on how long plants are held at the offshore facility before they are exported to New Zealand, as follows:

- If plants are held at the offshore facility for a minimum of two growing seasons prior to export, the minimum quarantine requirements will be six months active continuous growth in a Level 2 post-entry quarantine facility.
- If plants are held at the offshore facility for a minimum of one growing season prior to export, the minimum quarantine requirements will be 12 months active growth (including at least one period of six months active continuous growth) in a Level 3A post-entry quarantine facility.

# 3.2 Malus cuttings and tissue culture from non-approved 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 approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements**: The nursery stock will be grown for a minimum period of 24 months in a post-entry quarantine greenhouse. 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/tests are required.

# Pest List for Malus

# **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	naticaded peach tree borer
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	rea-sponed tonghom beene
Curculionidae	
	apple bud weevil
Anthonomus piri Eremnus atratus	black weevil
Eremnus airaius Eremnus cerealis	
	western province grain worm
Eremnus setulosus	grey weevil
Scolytidae	angle topic house
Hypothenemus obscurus	apple twig borer
Scolytus japonicus Scolytus monlogus	Japanese bark beetle fruit bark borer
Scolytus rugulosus	ITUIL DAIK DOIEF
Diptera	
Cecidomyiidae	red bud borer
Resseliella oculiperda Thomasini ma oculiperda	red bud borer
Thomasiniana oculiperda	red bud borer
Hormptera	
Aphididae	animaa anhid
Aphis spiraecola Diaspididae	spiraea aphid
Chrysomphalus aonidum	Florida red scale
Chrysomphalus dontaum Chrysomphalus dictyospermi	Spanish red scale
Diaspidiotus africanus	grey scale
Lepidoptera	grey scale
Cossidae	
Coryphodema tristis	quince trunk borer
Gelechiidae	quince trunk borer
Recurvaria syrictis	bud moth
Gracillariidae	oud mom
Marmara elotella	apple barkminer
Marmara pomonella	apple fruitminer
Oecophoridae Cryptophasa melanostiama	fruit tree borer
Cryptophasa melanostigma Purolidoo	
Pyralidae	American alum barer
Euzophera semifuneralis Ostrinia nubilalis	American plum borer European corn borer
Ostrina naonans	European com borer

Sesiidae	
Thamnosphecia pyri	apple bark borer
Synanthedon scitula	pecan tree borer
Mite	
Arachnida	
Acarina	
Eriophyidae	·
Aculops malus Exiophyses mali	eriophyid mite
Eriophyes mali Phyllocoptes mali	Willamette spider mite eriophyid mite
Cenopalpus chitraliensis	bryobia mite
Cenopalpus chiraliensis Cenopalpus haqii	banana mite
Cenopalpus naqu Cenopalpus orakiensis	Bailey's apple rust mite
Cenopalpus oracensis Cenopalpus pulcher	flat scarlet mite
<b>Tenuipalpidae</b>	hat scallet lifte
Brevipalpus lilium	false spider mite
Brevipalpus attan Brevipalpus obovatus	privet mite
Tenuipalpus taonicus	Pacific mite
Rhinotergum schestovici	mite
Tetranychidae	linte
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	
<b>Mycosphaerellaceae</b> Mycosphaerella pyri (anamorph Septoria pyricola)	loof flook of poor
Mycosphaerella tulasnei	leaf fleck of pear
Schizothyriaceae	rot
Schizothyrium perexiguum	greasy blotch
Erysiphales	greasy blotten
Erysiphaceae	
Pleochaeta mali	powdery mildew
Heotiales	powdery mildew
Dermateaceae	
Diplocarpon mali	black spot
Pezicula perennans	perennial canker
Sclerotiniaceae	1
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	T nacial op jenns for
Chaetomiaceae	
Chaetomium spp.	fruit rot
	II ult IOt
Taphrinales	
Taphrinaceae	leaf blister
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	copinido for
Armillaria mellea	armillaria root rot
Armillaria ostoyae	armillaria root rot
Armillaria tabescens	armillaria root rot
Ceratobasidiales	ammana 1001 101
Ceratobasidiaceae	
	4
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	wood deedy
Phlebia radiata	wood decay
Trametes ochracea	•
Poriales	wood decay
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
Basidiomycota: Urediniomycetes
Uredinales
Pucciniaceae
<i>Gymnosporangium clavipes</i>
<i>Gymnosporangium cornutum</i>
Gymnosporangium fuscum
Gymnosporangium globosum
Gymnosporangium hemisphaericum
Gymnosporangium libocedri
Gymnosporangium nelsonii
Gymnosporangium netsonii Gymnosporangium nidus-avis
Gymnosporangium nootkatense
Gymnosporangium shiraianum
<i>Gymnosporangium</i> spp.
Gymnosporangium tremelloides
Gymnosporangium yamadae
Gymnosporangium juniperi-virginianae
Unknown Uredinales
Roestelia fenzeliana
Roestelia levis
Basidiomycota: Ustomycetes
Platygloeales
Platygloeaceae
Helicobasidium mompa
Mitosporic Fungi (Coelomycetes)
Sphaeropsidales
Sphaerioidaceae
Cytospora schulzeri
Dothiorella mali
Phomopsis truncicola
Phyllosticta solitaria
Phyllosticta spp.
Pyrenochaeta mali
Sphaeropsis pyriputrescens
Mitosporic Fungi (Hyphomycetes)
Hyphomycetales
Dematiaceae
Alternaria mali
Alternaria spp.
Helminthosporium papulosum
Cladosporium spp.
<i>Epicoccum</i> spp.
Stemphylium spp.
Ulocladium spp.
Moniliaceae
Aspergillus spp.
Botrytis mali
Cephalosporium carpogenum
<i>Cephalosporium s</i> pp.
Penicillium spp.
Ramularia macrospora
Verticillium spp.
Tuberculariales
Tuberculariaceae
Fusarium spp.
Unknown Hyphomycetes
-
Oidium spp.

quince rust rust European pear rust American hawthorn rust rust Pacific Coast pear rust Rocky Mountain pear rust rust yellow cypress rust rust cedar apple rust common juniper gall rust Japanese apple rust cedar apple rust

rust rust

violet root rot

bark disease fruit rot blight apple blotch leaf spot fruit rot Sphaeropsis rot

alternaria blotch

black pox mouldy core mouldy core

cladosporium rot

coloured moulds fruit rot fruit rot

rot bellflower leaf spot verticillium wilt

powdery mildew

Oomycota:		
	osporales	
P	eronosporaceae	
	Phytophthora capsici	fruit rot of peppers
	Phytophthora palmivora	black rot
Bacterium		
Schizomyc		
	omonadales	
P	seudomonadaceae	
	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	
Phytoplasn		
	<i>Candidatus</i> Phytoplasma asteris'	Apple sessile leaf phytoplasma
D'	<i>Candidatus</i> Phytoplasma mali'	Apple proliferation phytoplasma
Disease of	unknown aetiology	
	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	

ORGANISM TYPES	MPI-ACCEPTED METHODS
Mites	Visual inspection <b>AND</b> approved miticide treatments as described in the section 2.2.1.6 of the Basic conditions [cuttings only] <b>or</b>
	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
Oomycetes	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	Herbaceous indexing ( <i>Chenopodium quinoa</i> and <i>Chenopodium amaranticolor</i> ) <b>AND</b> PCR
Tomato bushy stunt virus	Herbaceous indexing ( <i>Chenopodium quinoa</i> and <i>Chenopodium amaranticolor</i> )
Tomato ringspot virus	Herbaceous indexing (Chenopodium quinoa and Chenopodium
	amaranticolor) AND ELISA or PCR
Viroids	
Apple dimple fruit viroid	PCR
Apple fruit crinkle viroid	PCR
Apple scar skin viroid	PCR
Phytoplasmas	
'Candidatus Phytoplasma asteris'	Nested PCR or real time PCR using universal phytoplasma primers
(Apple sessile leaf phytoplasma)	
'Candidatus Phytoplasma mali'	Nested PCR or real time PCR using universal phytoplasma primers
(Apple proliferation phytoplasma)	
Diseases of unknown aetiology	
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	Growing season inspection
Apple decline	Growing season inspection
Apple freckle scurf agent	Growing season inspection
Apple green dimple and ring blotch agent Apple junction necrotic pitting agent	Growing season inspection 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	Growing season inspection
Apple russet wart agent	Growing season inspection
Apple star crack agent	Growing season inspection
Apple transmissible internal bark necrosis agent	Growing season inspection

# Inspection, Testing and Treatment Requirements for Malus

Notes:

- 1. 'Pest free area' or 'pest free place of production' endorsements for regulated viruses, viroids, phytoplasmas, and diseases of unknown aetiology 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 <u>unit for testing</u> 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. Herbaceous indicator hosts: *Chenopodium quinoa* and *Chenopodium amaranticolor*. Two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator plants must be grown at 18-25°C 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. 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, Mexico, Pakistan, Philippines

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

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

A. For Whole PlantsPEQ: Level 2Minimum 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. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- d. Conditions for Xanthomonas campestris pv. mangiferae-indicae

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "*Xanthomonas campestris* pv. *mangiferae-indicae* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

### OR

ii) "The plants were inspected during the growing season and no *Xanthomonas* campestris pv. mangiferae-indicae was detected".

## **B.** For Tissue Cultures

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

### As per section 2.2.2.4, an import permit is required PEQ: Level 2 Minimum Period: 6 months

a. Conditions for Xanthomonas campestris pv. mangiferae-indicae

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) *"Xanthomonas campestris* pv. *mangiferae-indicae* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

### OR

ii) "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*, *Phytophthora palmivora*, *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 *Leptospermum*, *Metrosideros* and *Myrtus* genera
- c. Conditions for *Phellinus noxius* (section 2.2.1.13) **Note:** Only applies to the following species: *Melaleuca leucadendra*
- d. Conditions for *Phytophthora palmivora* **Note:** Only applies to members of the *Psidium* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- e. Conditions for *Puccinia psidii* s.l. complex (including *Uredo rangelii*) <u>Additional Declaration</u>: "*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 members of the *Leptospermum*, *Metrosideros* and *Myrtus* genus

# **B.** For Tissue Cultures

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

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5) **Note:** Only applies to members of the *Leptospermum*, *Metrosideros* and *Myrtus* genus
- b. Conditions for Puccinia psidii s.l. complex (including Uredo rangelii)

# **OPTION 1:**

One of the following Additional Declarations must be endorsed on the phytosanitary certificate: i) *"Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in

[the country of origin]".

### OR

ii) "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:**

## As per section 2.2.2.4, an import permit is required

PEQ: Level 2 Tissue culture laboratory

### Minimum Period: 4 weeks

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

# Miscanthus x giganteus

- **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) <u>Phytosanitary requirements</u>

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 surface sterilised in a solution of 0.5% sodium hypochlorite 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.

# (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. Subculturing 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 x giganteus***:**

#### Bacteria

Acidovorax avenae ssp. avenae Leifsonia xyli subsp. Xyli

### Fungi

Acremonium sp. Colletotrichum sp. Diaporthe sp. Diplodia sp. Drechslera gigantean Fusarium miscanthi Fusarium pallidoroseum Glomerella sp. Glomerella tucumanensis Helminthosporium sp. Leptosphaeria sp. Magnaporthe salvinii Mycosphaerella recutita *Mycosphaerella striatiformans* Nigrospora sp. Passalora koepkei Peronosclerospora sp. Phlyctema sp. Phoma sp. Phomopsis sp. Phyllachora sp. Puccinia melanocephala Ramularia sp. Rhizoctonia sp. Stagonospora sp. Thanatephorus cucumeris Ustilago scitaminea Verticillium sp.

#### Mites

Schizotetranychus celarius

#### Viruses

Miscanthus streak virus Sugarcane mosaic virus Bacterial leaf blight Sugarcane ratoon stunting disease

Black bundle disease Leaf spot Canker Blight Eyespot Rot Rot Leaf spot Leaf spot Eyespot Canker Stem rot Leaf blight Leaf spot Stalk rot Yellow spot Downy mildew Canker Blight Blight Leaf spot Sugarcane rust Anthracnose Root rot Scorch Blight Sugarcane smut Verticillium wilt

Bamboo mite

# Treatment and Testing Requirements during post entry quarantine:

### Guidance:

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 TYPES	MPI ACCEPTED MEASURES	
Fungi		
Ustilago scitaminea	PCR/BIO-PCR, <b>OR</b> two consecutive hot water treatments at a minimum temperature of 50°C for 3 hours per treatment <b>OR</b> 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, <b>OR</b> 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**: Bunchy top virus, *Cosmopolites sordidus*, *Fusarium oxysporum* f.sp. *cubense*, *Mycosphaerella fijiensis*, *Pseudomonas solanacearum*, *Radopholus similis* 

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 transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer. **PLUS** 

a. Conditions for Bunchy top virus <u>Additional Declaration</u>: "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 PlantsPEQ: Level 2Minimum Period: 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for Phellinus noxius (section 2.2.1.13)
- c. Conditions for Alternanthera mosaic virus and Plantago asiatica mosaic virus

<u>Additional Declaration</u>: "*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

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

As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for Alternanthera mosaic virus and Plantago asiatica mosaic virus

<u>Additional Declaration</u>: "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 *Narcissus*", 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, United States of America:

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

#### a. Additional Declaration

i) For bulbs produced under an 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

ii) For bulbs NOT produced under an 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, United States of America:

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

a. Additional Declarations

"The dormant bulbs in this consignment have been:

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

AND

ii) 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** 

a. Conditions for virus diseases
 <u>Additional Declaration</u>: "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.

#### Type of Olea nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

#### Pests of Olea

Refer to the pest list.

#### **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) <u>Phytosanitary requirements</u>

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]

(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 approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests 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 Scolytidae Hylesinus fraxini bark beetle Hylesinus oleiperda bark beetle Hylesinus toranio bark beetle Phloeotribus oleae bark beetle Phloeotribus scarabaeiodes bark beetle Xylosandrus compactus Diptera Cecidomyiidae Thomasiniana sp. Asterolecaniidae Pollinia pollini 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 Selenaspidus articulatus Lepidoptera Pyralidae Euzophera pinguis bark borer Mite Arachnida Acarina Eriophyidae Aceria cretica mite Aceria oleae olive mite Aculops benakii Aculus olearius olive mite Ditrymacus athiasellus olive mite Eriophyes oleae Eriophyes olivi olive mite Oxycenus maxwelli Oxycenus niloticus Oxycenus noloticus Tegonotus hassani Tenuipalpidae Brevipalpus chalkidicus

wood-boring beetle black twig borer olive bark midge globe shaped olive scale white peach scale West Indian red scale olive yellow spot mite olive bud mite

olive leaf and flower mite olive leaf and flower mite olive leaf and flower mite olive rust mite

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	hig hashed alum mits
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 Verlogialas	black mildew
Xylariales Xylariaceae	
Xylaria sicula	root rot
Basidiomycota	1001101
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	wood rot
Phellinus igniarius Oomycota	wood fot
Peronosporales	
Peronosporaceae	
Phytophthora palmivora	Coconut budrot
Phytophthora ramorum	Sudden oak death disease
	Sudden bak 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	Texas root rot
omnivorum)	
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	brown an at
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	C
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)
Mites	Visual inspection <b>AND</b> approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] <b>or</b> binocular microscope inspection in PEQ [plants in tissue culture only].
Fungi	Growing season inspection in PEQ for disease symptom expression.
Oomycete	Growing season inspection in PEQ for disease symptom expression.
Bacteria	
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
Viruses	
<i>Cherry leaf roll virus</i> [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 <b>AND</b> nested PCR <b>or</b> 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.

# Paeonia (herbaceous species)

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Paeonia* (herbaceous)".

#### **GENERAL CONDITIONS:**

**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, 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

- a. Conditions for *Cronartium flaccidum* <u>Additional Declaration</u>: "The dormant tubers have been sourced from a 'pest free area' or 'pest free place of production', free from *Cronartium flaccidum*".
- b. Conditions for Phymatotrichopsis omnivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The dormant tubers have been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

#### OR

ii) "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".

#### AND

- 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.

# Paeonia (tree species)

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

#### **GENERAL CONDITIONS:**

**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 PlantsPEQ: Level 1Minimum Period: 3 monthsIsolation: open ground - 400m from any *Pinus* tree

- a. Conditions for *Cronartium flaccidum* 
  - i) <u>Aditional Declaration</u>: "*Cronartium flaccidum* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

## AND

ii) <u>Aditional Declaration:</u> "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water".

#### **B.** For Tissue Cultures

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

# Papaver somniferum

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

#### **GENERAL CONDITIONS:**

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: Phytophthora palmivora, 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

- a. Conditions for Witches broom phytoplasma <u>Additional Declaration</u>: "Witches broom phytoplasma is not known to occur in [the country or state where the plants were grown]".
- b. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

#### **B.** For Tissue Cultures

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

 a. Conditions for Witches broom phytoplasma <u>Additional Declaration</u>: "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 approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests are required.

# Pest List for Persea

#### **REGULATED PESTS (actionable)**

Insect Insecta Coleoptera Chrysomelidae Monolepta apicalis Monolepta australis Curculionidae Copturus aguacatae Diaprepes abbreviatus Heilipus squamosus Naupactus xanthographus Hemiptera Coreidae Amblypelta lutescens Amblypelta nitida Pseudotheraptus wayi Lygaeidae Nysius ericae Tingidae Pseudacysta perseae Homoptera Alevrodidae Aleurocanthus woglumi Parabemisia myricae Paralevrodes minei Paraleyrodes perseae *Tetraleurodes perseae* Trialeurodes floridensis Coccidae Ceroplastes floridensis Ceroplastes rubens Ceroplastes rusci Chloropulvinaria psidii Protopulvinaria pyriformis Pulvinaria mammeae Diaspididae Aonidiella orientalis Aspidiotus destructor Chrysomphalus aonidum Chrysomphalus dictyospermi Fiorinia fioriniae Pinnaspis strachani Selenaspidus articulatus Margarodidae Icerya seychellarum Pseudococcidae Dysmicoccus brevipes Ferrisia virgata Nipaecoccus nipae Planococcus citri Psyllidae Trioza aguacate Trioza anceps Trioza godoyae Trioza perseae

monolepta beetle red-shouldered leaf beetle

branch boring weevil citrus weevil

fruit tree weevil

banana spotting bug fruit-spotting bug coreid bug

false chinch bug

avocado lace bug

citrus blackfly Japanese bayberry whitefly whitefly plumeria whitefly whitefly avocado whitefly

Florida wax scale red wax scale fig wax scale guava scale pyriform scale

oriental yellow scale coconut scale Florida red scale dictyospermum scale fiorinia scale hibiscus snow scale West Indian red scale

Seychelles scale

pineapple mealybug striped mealybug coconut mealybug citrus mealybug

psyllid psyllid psyllid 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	<b>, 1</b>
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
	omnivorous leafroller
Platynota stultana Thysonontoro	ommivorous leaffoner
Thysanoptera Thyinidae	
Thripidae	11 1 1 1 1
Retithrips syriacus	black vine thrips
Selenothrips rubrocinctus	red-banded thrips
Mite	
Arachnida	
Acarina Totuonuchida a	
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	anthracnose
Colletotrichum gloeosporioides var. minus)	ununuenose
Xylariales	
Xylariaceae	
Rosellinia bunodes	
	-
Rosellinia pepo Bosidiomeneto	-
Basidiomycota	
Hymenochaetales	
Hymenochaetaceae	1
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)
Mites	Visual inspection <b>AND</b> approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] <b>or</b> 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
Viruses	
Avocado cryptic virus 3	'pest free area' <b>or</b> 'pest free place of production' <b>AND</b> Growing season inspection in PEQ for disease symptom expression.
Viroids	
Avocado sunblotch viroid [strains not in New Zealand]	Hybridisation or PAGE or PCR (two sets).
Potato spindle tuber viroid	'pest free area' <b>or</b> 'pest free place of production' <b>AND</b> Growing season inspection in PEQ for disease symptom expression.
Diseases of unknown aetiology	
Avocado black streak	'pest free area' <b>or</b> 'pest free place of production' <b>AND</b> 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 *Petunia*", 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 palmivora*, *Potato spindle tuber viroid*, *Tomato chlorotic dwarf viroid* 

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

#### A. For Whole Plants and Cuttings

Import Permit: An import permit is required

**GM Testing Certificate or Non-GMO Declaration:** A copy of the GM testing certificate or signed non-GMO declaration must be submitted with the import permit application and with the imported whole plants and cuttings upon arrival in New Zealand

#### **PEQ**: Level 2

Minimum Period: 3 months

a. Conditions for *Phytophthora palmivora* **Note:** Only applies to members of the *Petunia* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- b. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Petunia*".

c. Conditions for Tomato chlorotic dwarf viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where Tomato chlorotic dwarf viroid is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from Tomato chlorotic dwarf viroid".

#### OR

iii) Pre-determined testing in PEO: refer to "Inspection, Testing and Treatment Requirements for Petunia".

#### **B.** For Tissue Cultures

**GM Testing Certificate or Non-GMO Declaration:** A copy of the GM testing certificate or signed non-GMO declaration must be submitted with the imported tissue cultures upon arrival in New Zealand

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

a. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from Potato spindle tuber viroid".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for Petunia".

Guidance for importers: Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of Potato spindle tuber viroid during the quarantine period.

#### b. Conditions for Tomato chlorotic dwarf viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where Tomato chlorotic dwarf viroid is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from Tomato chlorotic dwarf viroid".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for Petunia".

Guidance for importers: Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of Tomato chlorotic dwarf viroid during the quarantine period.

#### **Requirements for** *Petunia* **nursery stock:**

All varieties of *Petunia* nursery stock imported into New Zealand must meet one of the following requirements:

- i. A non-GMO declaration, signed by the importer and exporter, that the *Petunia* nursery stock is free from genetically modified material must be submitted (for a copy of the 'Declaration Form' refer to the end of this schedule). **OR**
- A copy of the GM testing certificate that confirms that the variety is not a new organism as defined by the Hazardous Substances and New Organisms Act 1996 (HSNO Act 1996) must be submitted. GM testing certificates must meet the following requirements:

Requirements for GM Testing Certificates

- Testing must occur at an MPI-approved or recognised laboratory, in accordance with the standard PIT-GMO-ALGMOT: *Approval of Laboratories for Genetically Modified Organism Testing*, and the *Protocol for Testing for the Presence of Genetically Modified Plant Material*.
- The GM testing certificate must include the genus name or species name and a unique identifier (e.g. variety name or lot/line number), which must be reproduced on other import documentation to support traceability.
- Sampling for the purposes of testing must be carried out in accordance with the Protocol for Testing for the Presence of Genetically Modified Plant Material.

#### Guidance:

• The Protocol, and a list of MPI-approved and recognised facilities, are on the website Genetically Modified Plant Material <u>http://mpi.govt.nz/importing/plants/seeds-for-sowing/genetically-modified-seeds/</u>

## Inspection, Testing and Treatment Requirements for Petunia

ORGANISM	MPI-ACCEPTED METHODS	Comments
Viroids		
Potato spindle tuber viroid	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility
<i>Tomato chlorotic dwarf viroid</i>	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Potato spindle tuber viroid* and *Tomato chlorotic dwarf viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

# **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) 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 - <u>https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard</u>,

Insert 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 nursery stock 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 - <u>https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard</u>,

Insert 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 (details) and	Signed by Importer and Company Name (details) and
date	date

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 *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: Basella rugose mosaic virus, Capsicum chlorosis virus, Phytophthora palmivora

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 palmivora* One of the following Additional Declarations must be endorsed on the phytosanitary certificate:
  - i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

#### **B.** For Whole Plants in growing media from Taiwan No import permit is required **PEO:** None

**Specific Requirements:** Sections 2.2.1.6 and 2.2.1.9 of the Basic Conditions are not required. **Additional Declarations:** 

- a. Additional Declaration
  - i) "The *Phalaenopsis* spp. whole plants in MPI-approved growing media in this consignment:
    - have been sourced from mother stock that has been tested for, and found free from *Capsicum chlorosis virus* and *Basella rugose mosaic virus*, AND
    - comply with the requirements of the Offshore Assurance Programme (OAP) implemented by New Zealand MPI and Taiwan BAPHIQ,
       AND

- have been inspected and found free from regulated viruses, insects, mites, fungi and bacteria,
  - AND
- have been treated with appropriate broad-spectrum insecticide and miticide drench no more than 14 days prior to export to New Zealand."
- b. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

#### **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 *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 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 *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 United States of America

**Quarantine Pests**: Cadang-cadang, Fusarium wilt, Lethal yellowing, *Phytophthora palmivora*, *Xylella fastidiosa* 

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

A. For Whole Plants and CuttingsPEQ: Level 2Minimum Period: 3 monthsHeight Limit: Plants must not exceed 1.5m in height

a. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- c. Conditions for Cadang cadang, lethal yellowing and *Fusarium oxysporum* f.sp. *canariensis* 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 Tissue Culture** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for tissue cultures sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Conditions for Cadang cadang and lethal yellowing

<u>Additional Declaration</u>: "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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- c. Conditions for Gymnosporangium spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) "*Gymnosporangium* spp. are not known to occur on \_\_\_\_\_ [name of plant species] in \_\_\_\_\_ [the country or state where the plants were produced]". **OR**
- ii) "The plants were from a crop inspected during the growing season and no rust diseases were detected.

#### AND

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

#### **B.** For Tissue Cultures

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

 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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS** 

As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Ceratocystis platani*:

#### **OPTION 1:** For countries where *Ceratocystis platani* is not known to be present

i) <u>Additional Declaration</u>: "The plants have been sourced from a country free from *Ceratocystis platani*"

#### **OPTION 2:** For countries where *Ceratocystis platani* is known to be present

i) <u>Additional Declaration</u>: "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.

#### **B.** For Tissue Cultures

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

 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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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 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 *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-approved facilities (quarantine stations)

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Poncirus*, the approved 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 approved facility as specified in the agreement between MPI and the approved facility operator. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

#### (iii) <u>Phytosanitary requirements</u>

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 an MPI-approved facility
  - AND
- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the approved 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 approved facility as required in the agreement between MPI and the approved facility operator. AND
- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved 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/tests 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-approved 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) <u>Phytosanitary requirements</u>

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) <u>Additional declarations to the phytosanitary certificate</u>

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 approved 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-approved 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-approved facilities

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Poncirus*, the approved 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) <u>Pest proof container and growing media for tissue culture</u>

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 approved facility as specified in the arrangement between MPI and the approved facility operator. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

#### (iv) <u>Phytosanitary requirements</u>

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 an MPI-approved facility and,

## AND

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

## (v) <u>Additional declarations to the phytosanitary certificate</u>

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 approved facility as specified in the agreement between MPI and the approved facility operator. AND
- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved 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-approved 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) <u>Pest proof container and growing media for tissue culture</u>

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-approved 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 shot-hole borer Apate terebrans 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 red-shouldered leaf beetle Monolepta australis 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 Scolvtidae Salagena sp. alnus ambrosia beetle Xylosandrus germanus Diptera **Cecidomviidae** leafcurling midge Contarinia citri Contarinia okadai citrus flower gall midge Trisopsis sp. Chamaemviidae 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 coreid bug Leptoglossus membranaceus Mictis profana crusader bug Paradasynus spinosus squash bug Veneza phyllopus leaf-footed bug Lygaeidae Nvsius 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. Aleurothrixus floccosus Aleurotuba jelinekii Aleurotuberculatus aucubae Bemisia citricola Dialeurodes citri Dialeurodes citrifolii Dialeurolonga sp. Parabemisia myricae Siphoninus phillyreae Aphididae Aphis fabae Aulacorthum magnoliae Cicadellidae Asymmetrasca decedens Circulifer opacipennis Circulifer tenellus Cuerna costalis Edwardsiana flavescens Empoasca bodenheimeri Empoasca citrusa Empoasca decipiens Empoasca distinguenda Empoasca fabae Empoasca onukii *Homalodisca coagulata* Homalodisca lacerta Jacobiasca lybica Neoaliturus haematoceps Penthimiola bella Scaphytopius nitridus Cicadidae Cryptotympana facialis Meimuna opalifera Coccidae Ceroplastes floridensis Ceroplastes japonicus Ceroplastes rubens Ceroplastes rusci Coccus celatus Coccus pseudomagnoliarum Coccus viridis Cribrolecanium andersoni Gascardia brevicauda Protopulvinaria pyriformis Pulvinaria aethiopica Pulvinaria aurantii Pulvinaria cellulosa Saissetia citricola Saissetia somereni **Dactylopiidae** Dactylopius filamentosis Dactylopius vastator Diaspididae Aonidiella citrina Chrysomphalus aonidum Chrysomphalus bifasciculatus Chrysomphalus dictyospermi Chrysomphalus pinnulifera Ischnaspis longirostris

whitefly woolly whitefly aucuba whitefly citrus whitefly cloudywinged whitefly Japanese bayberry whitefly phillyrea whitefly bean aphid Japanese elder aphid leafhopper beet leafhopper leafhopper leafhopper green citrus leafhopper green leafhopper potato leafhopper tea green leafhopper glassy-winged sharpshooter cotton jassid leafhopper citrus leafhopper leafhopper black cicada elongate cicada Florida wax scale pink wax scale red wax scale fig wax scale citricola scale green scale white powdery scale white waxy scale pyriform scale soft green scale citrus cottony scale pulvinaria scale citrus string cottony scale vellow scale Florida red scale brown scale dictyospermum scale false purple scale

black thread scale

Lepidosaphes beckii Lepidosaphes gloverii Parlatoria ziziphi Pseudaonidia duplex Selenaspidus articulatus Unaspis citri Unaspis yanonensis Flatidae Colgar peracuta Geisha distinctissima Lawana conspersa Metcalfa pruinosa Fulgoridae Anzora unicolor Margarodidae Drosicha howardi Icerva sevchellarum Ortheziidae Nipponorthezia ardisiae Pseudococcidae Allococcus spp. Ferrisia consobrina Ferrisia virgata Nipaecoccus vastator Nipaecoccus viridis Paracoccus burnerae Planococcus kraunhiae Planococcus lilacinus Planococcus minor Pseudococcus citriculus Pseudococcus commonus Pseudococcus filamentosus Rastrococcus spinosus Rhizoecus kondonis Psyllidae Diaphorina citri Trioza ervtreae [vector] 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]

purple scale Glover scale black parlatoria scale camphor scale West Indian red scale citrus snow scale Japanese citrus scale

green broad-winged planthopper green flatid planthopper planthopper

persimmon mealybug Seychelles scale

ensign scale

- mealybug striped mealybug nipa mealybug hibiscus mealybug spherical mealybug Japanese wisteria mealybug citrus mealybug passionvine mealybug smaller citrus mealybug
- mealybug mealybug Kondo mealybug

citrus psyllid citrus psyllid

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]	-
<i>Psyllaephagus pulvinatus</i> [Animals Biosecurity] <b>Eulophidae</b>	-
Aprostocetus ceroplastae [Animals Biosecurity]	
<i>Elachertus fenestratus</i> [Animals Biosecurity]	-
<i>Tamarixia radiatus</i> [Animals Biosecurity]	_
Eupelmidae	-
Anastatus biproruli [Animals Biosecurity]	_
Eurytomidae	
Bruchophagus fellis	citrus gall midge
Formicidae	entrus gun mage
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	
(hastownwar argails   Animola Dioconinity)	_
Chaetomymar gracile [Animals Biosecurity]	
Chaetomymar lepidum [Animals Biosecurity]	-
Chaetomymar lepidum [Animals Biosecurity] Gonatocerus incomptus [Animals Biosecurity]	-
Chaetomymar lepidum [Animals Biosecurity] Gonatocerus incomptus [Animals Biosecurity] Platygasteridae	-
Chaetomymar lepidum [Animals Biosecurity] Gonatocerus incomptus [Animals Biosecurity] Platygasteridae Amitus hesperidum [Animals Biosecurity]	-
Chaetomymar lepidum [Animals Biosecurity] Gonatocerus incomptus [Animals Biosecurity] Platygasteridae Amitus hesperidum [Animals Biosecurity] Amitus spiniferus [Animals Biosecurity]	- - -
Chaetomymar lepidum [Animals Biosecurity] Gonatocerus incomptus [Animals Biosecurity] Platygasteridae Amitus hesperidum [Animals Biosecurity] Amitus spiniferus [Animals Biosecurity] Fidiobia citri [Animals Biosecurity]	- - - -
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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]	- - - - - - - -
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]	- - - - - - - - -

Trichogramma platneri [Animals Biosecurity] Vespidae Polistes spp. [Animals Biosecurity] Isoptera Termitidae Odontotermes lokanandi Lepidoptera Arctiidae Lemyra imparilis Blastobasidae Holcocera iceryaeella Cosmopterigidae Pyroderces rileyi Geometridae Anacamptodes fragilaria Ascotis selenaria reciprocaria Gymnoscelis rufifasciata Hyposidra talaca Gracillariidae Phyllocnistis citrella Hepialidae Endoclita excrescens Endoclita sinensis Lycaenidae Virachola isocrates Lymantriidae Orgyia vetusta Metarbelidae Indarbela tetraonis Noctuidae Arcte coerula Eudocima fullonia Helicoverpa assulta Helicoverpa punctigera Tiracola plagiata Xylomyges curialis Nymphalidae Charaxes jasius Oecophoridae Psorosticha melanocrepida Psorosticha zizyphi Stathmopoda auriferella Papilionidae Papilio aegeus aegeus Papilio anactus Papilio cresphontes Papilio dardanus cenea Papilio demodocus Papilio demoleus demoleus Papilio helenus nicconicolens Papilio machaon asiatica Papilio memnon Papilio memnon thunbergii Papilio nireus lyaeus Papilio polytes polytes Papilio protenor demetrius Papilio xuthus Papilio zelicaon **Psychidae** Eumeta hardenbergi

paper wasps termite mulberry tiger moth pink scavenger caterpillar koa haole looper citrus looper geometrid moth citrus leafminer Japanese swift moth pomegranate butterfly western tussock moth stem borer fruit-piercing moth fruit-piercing moth cape gooseberry budworm oriental tobacco budworm banana fruit caterpillar noctuid moth nymphalid butterfly citrus leafroller citrus leafroller apple heliodinid small citrus butterfly orange dog orange dog citrus swallowtail citrus swallowtail anise swallowtail

Eumeta japonica Eumeta minuscula Eumeta moddermanni Hyalarcta huebneri Pyralidae Apomyelois ceratoniae Tortricidae Adoxophyes sp. Amorbia cuneana Archips argyrospilus Archips machlopis Archips occidentalis Archips rosanus Argyrotaenia citrana Cacoecimorpha pronubana Cryptophlebia batrachopa Cryptophlebia leucotreta Homona magnanima Isotenes miserana Platynota stultana Tortrix capensana Yponomeutidae Prays citri Prays parilis Neuroptera Chrysopidae Chrysopa oculata [Animals Biosecurity] Coniopterygidae Coniopteryx vicina [Animals Biosecurity] Conwentzia barretti [Animals Biosecurity] Orthoptera Acrididae Zonocerus elegans Grvllidae Ornebius kanetataki Tettigoniidae Caedicia sp. Holochlora japonica Microcentrum retinerve Scudderia furcata **Psocoptera** Archipsocidae Archipsocus sp. Thysanoptera Aeolothripidae Franklinothrips vespiformis [Animals Biosecurity] Thripidae Chaetanaphothrips orchidii Leptothrips mali Scirtothrips aurantii Scirtothrips citri Scirtothrips dorsalis Scirtothrips mangiferae Scolothrips sexmaculatus [Animals Biosecurity] Taeniothrips kellyanus Taeniothrips sp. Thrips coloratus Thrips flavus Thrips palmi **Unknown Insecta** 

tea bagworm leaf case moth date pyralid leafroller fruit tree leafroller leafroller leafroller rose leafroller orange tortrix carnation leafroller false codling moth oriental tea tortrix orange fruitborer omnivorous leafroller tortricid moth citrus flower moth citrus flower moth elegant grasshopper cricket Japanese broadwinged katydid smaller angular-winged katydid fork-tailed bush katydid bark louse banana rust thrips black hunter thrips citrus thrips citrus thrips chilli thrips mango thrips

thrips flower thrips palm thrips

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 Provincipus chilopois	false spider mite
Brevipalpus chilensis Brevipalpus lewisi	false spider mite bunch mite
Brevipalpus tewist Brevipalpus obovatus	privet mite
Tenuipalpus emeticae [Animals Biosecurity]	privet inite
Tuckerella ornata	-
Ultratenuipalpus gonianaensis	tenuipalpid mite
Tetranychidae	tenuipaipia inite
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	
Achatina immaculata Lissachatina immaculata	- amail
	snail
<b>Bradybaenidae</b> Acusta despecta sieboldiana	snail
Subulinidae	Shan
Rumina decollata	snail
Urocyclidae	Shan
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	
<i>Didymosphaeria</i> sp. <b>Mycosphaerellaceae</b>	
Guignardia citricarpa (anamorph Phyllosticta	citrus black spot
<i>citricarpa</i> ) [black spot strain]	childs black spot
Mycosphaerella citri (anamorph Stenella citri-grisea)	rind blotch
Mycosphaerella horii	greasy spot
Patellariales	grousy spor
Patellariaceae	
Rhytidhysteron rufulum	
Saccharomycetales	
Saccharomycetaceae	
Debaryomyces hansenii	-
Galactomyces citri-aurantii (anamorph Geotrichum	sour rot
citri-aurantii)	
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	ion iungus
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 Symeopholoctrococo	
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
J	
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	-
Phyt	oplasma	
	Candidatus Phytoplasma aurantifolia	witches' broom phytoplasma
	rubbery wood	-
Dise	ase 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	-

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shell bark of lemons

zonate chlorosis

## Inspection, Testing and Treatment Requirements for *Poncirus\**

ORGANISM TYPES	MPI-ACCEPTED METHODS
Fungi	Country freedom OR growing season inspection for symptom expression.
Bacteria	
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 $32^{\circ}$ C. Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot temperature (> $30^{\circ}$ C) and incubate cultures at $32^{\circ}$ 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.
Viruses	indicator,
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures temperatures 18 to 25°C.
citrus infectious	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow
variegation ilarvirus	indicators at cool temperatures 18 to 25°C.
citrus infectious	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow
variegation ilarvirus	indicators at cool temperatures 18 to 25°C.
[crinkly leaf strain]	
citrus leaf rugose	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators
ilarvirus	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	Country freedom OR graft inoculated Rusk citrange, rough lemon, <i>Citrus excelsa</i> ,
capillovirus	citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza closterovirus [strains not	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
in New Zealand] citrus yellow mosaic	Country freedom OR graft inoculated sweet orange, sour orange and citron.
badnavirus 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.
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.

ORGANISM TYPES	MPI-ACCEPTED METHODS	
Viroids		
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-	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron	
IV)	at hot temperature 27 to 32°C.	
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron	
C	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.	
Diseases of unknown aet	iology	
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	
5	before releasing from quarantine.	
citrus fatal yellows	Country freedom OR graft inoculated Citrus macrophylla.	
citrus impietratura	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth	
disease	indicators at cool temperatures 18 to 25°C.	
citrus sunken vein	Country freedom OR other suitable test.	
disease		
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 <i>Citrus excelsa</i> .	
	Grow indicators at cool temperatures 18 to 25°C.	
gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot	
	temperature 27 to 32°C.	
kassala disease	Country freedom, cuttings collected from kassala free area.	
lemon sieve tube	Country freedom OR other suitable test.	
necrosis		
shell bark of lemons	Country freedom OR other suitable test.	
zonate chlorosis	Country freedom, cuttings collected from kassala free area.	
Phytoplasmas		
Candidatus phytoplasma	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18	
aurantifolia	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, United States of America

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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- d. Conditions for Phellinus noxius (section 2.2.1.13)

## **B.** For Tissue Cultures

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

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

**Note:** The guidance below only applies to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Prunus*".

#### Guidance:

Prunus nursery stock (plants for planting) is no longer eligible for import under this schedule.

Import requirements for *Prunus* plants for planting are now set out in: Import Health Standard: *Prunus* Plants for Planting, available on the plant imports website at: <u>https://www.biosecurity.govt.nz/dmsdocument/39488-Prunus-Plants-for-Planting-Import-Health-Standard</u> **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., *Phytophthora ramorum*, Uredinales, *Xylella fastidiosa* 

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

A. For Whole PlantsPEQ: Level 3BMinimum 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** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

## Pyrus

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

**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, United States of America.

**Quarantine Pests**: Ceratocystis fagacearum, Ceratocystis fimbriata, Cronartium quercuum, Cryphonectria parasitica, 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*

#### **B. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, 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 United States of America 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for virus diseases

<u>Additional Declaration</u>: "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) <u>Additional Declaration</u>: "The dormant bulbs have been sourced from a 'Pest free area', free from *Phymatotrichopsis omnivora*".

## **OPTION 2**

i) <u>Additional Declaration:</u> "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*:

<u>Additional Declaration</u>: "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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for Phymatotrichopsis omnivora
  - i) <u>Additional Declaration</u>: "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** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

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

<u>Additional Declaration</u>: "The cultures have been derived from parent stock tested and found free of virus diseases."

## Rhododendron

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

#### **GENERAL CONDITIONS:**

#### Approved Countries: All

**Quarantine Pests:** *Microsphaera* spp., *Ovulinia azalea*, *Phellinus noxius*, *Phytophthora 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. Conditions for Microsphaera spp. and rust diseases
  - i) <u>Additional Declaration</u>: "*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 an 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. Conditions 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 an 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.

Ribes

## Scientific name

Ribes nigrum Ribes uva-crispa

## **Commodity Sub-class**

Whole Plants Whole Plants **Date Issued** 

19 June 1998 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	
Oomycetes	Phytophthora ramorum	
Bacteria	Ralstonia pseudosolanacearum, Xylella fastidiosa	
Viruses	Blackberry chlorotic ringspot virus, Grapevine Pinot gris virus,	
	Raspberry ringspot virus (strains not in New Zealand), Rose rosette	
	virus	
Phytoplasmas	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 *Ralstonia pseudosolanacearum* One of the following Additional Declarations must be endorsed on the phytosanitary certificate:
  - i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

## OR

- ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- c. Conditions for Phellinus noxius (section 2.2.1.13)
- d. Conditions for viruses
  - i) <u>Additional Declaration</u>: "[*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*"
- e. Conditions for Grapevine Pinot gris virus

## Rosa

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The *Rosa* plants in this consignment were produced in a 'pest free area' for *Grapevine Pinot gris virus*".

## OR

- ii) "The *Rosa* plants in this consignment were produced in a 'pest free place of production' for *Grapevine Pinot gris virus*".
- f. Conditions for phytoplasmas Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*".
- g. Conditions for Pucciniales
  - i) <u>Additional Declaration</u>: "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".
- h. Conditions for *Phytophthora ramorum* (section 2.2.1.11) Note: Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

## **B.** For Non-dormant Cuttings

#### PEQ: Level 2

#### Minimum Period: 6 months

- a. Conditions for *Ralstonia pseudosolanacearum* One of the following Additional Declarations must be endorsed on the phytosanitary certificate:
  - i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

OR

- ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- c. Conditions for viruses
  - i) <u>Additional Declaration</u>: "[*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 Grapevine Pinot gris virus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The *Rosa* plants in this consignment were produced in a 'pest free area' for *Grapevine Pinot gris virus*".

## OR

- ii) "The *Rosa* plants in this consignment were produced in a 'pest free place of production' for *Grapevine Pinot gris virus*".
- e. Conditions for phytoplasmas Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*".
- f. 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".
- g. Conditions for *Phytophthora ramorum* (section 2.2.1.11) Note: Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

## **C.** For Dormant Cuttings

#### PEQ: Level 2

## Minimum Period: 6 months

- a. Conditions for *Ralstonia pseudosolanacearum* One of the following Additional Declarations must be endorsed on the phytosanitary certificate:
  - i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

## OR

- ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
- b. Conditions for Xylella fastidiosa (section 2.2.1.12)
- c. Conditions for viruses

i) <u>Additional Declaration</u>: "[*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 Grapevine Pinot gris virus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The *Rosa* plants in this consignment were produced in a 'pest free area' for *Grapevine Pinot gris virus*".

OR

- ii) "The *Rosa* plants in this consignment were produced in a 'pest free place of production' for *Grapevine Pinot gris virus*".
- e. Conditions for phytoplasmas: Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*".
- f. Conditions for *Phytophthora ramorum* (section 2.2.1.11) **Note:** Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

## **D. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

# As per section 2.2.2.4, an import permit is required **PEQ:** Level 2

Minimum Period: 6 months

- a. Conditions for *Ralstonia pseudosolanacearum* One of the following Additional Declarations must be endorsed on the phytosanitary certificate:
  - i) "The [insert plant species] plants were sourced from a 'pest free area', free from *Ralstonia pseudosolanacearum*".

OR

- ii) "The [insert plant species] plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*".
- b. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
- c. Conditions for viruses
  - i) <u>Additional Declaration</u>: "[*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 Grapevine Pinot gris virus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The *Rosa* plants in this consignment were produced in a 'pest free area' for *Grapevine Pinot gris virus*".

#### OR

ii) "The *Rosa* plants in this consignment were produced in a 'pest free place of production' for *Grapevine Pinot gris virus*".

#### E. For Whole Plants imported into a level 3A PEQ facility

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

# **PEQ:** Level 3A **Minimum Period:** 6 months

- a. Conditions for *Ralstonia pseduosolanacearum* Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*".
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- c. Conditions for Phellinus noxius (section 2.2.1.13)
- d. Conditions for viruses
  - i) <u>Additional Declaration</u>: "[*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*".
- e. Conditions for Grapevine Pinot gris virus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The *Rosa* plants in this consignment were produced in a 'pest free area' for *Grapevine Pinot gris virus*".

OR

- ii) "The *Rosa* plants in this consignment were produced in a 'pest free place of production' for *Grapevine Pinot gris virus*".
- f. Conditions for phytoplasmas

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

- g. Conditions for Pucciniales
  - i) <u>Additional Declaration</u>: "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".
- h. Conditions for *Phytophthora ramorum* (section 2.2.1.11) Note: Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

#### F. For Non-dormant Cuttings or Dormant Cuttings imported into a level 3A PEQ facility

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

## **PEQ:** Level 3A **Minimum Period:** 6 months

- a. Conditions for *Ralstonia pseduosolanacearum* Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*".
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- c. Conditions for viruses
  - i) <u>Additional Declaration</u>: "[*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 Grapevine Pinot gris virus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The *Rosa* plants in this consignment were produced in a 'pest free area' for *Grapevine Pinot gris virus*".

#### OR

- ii) "The *Rosa* plants in this consignment were produced in a 'pest free place of production' for *Grapevine Pinot gris virus*".
- f. Conditions for phytoplasmas

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

- g. Conditions for Pucciniales Note: Only applies to non-dormant cuttings
  - i) <u>Additional Declaration</u>: "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".
- h. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
   Note: Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

## G. For Tissue cultures imported into a level 3A PEQ facility

Guidance for importers: This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

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

#### As per section 2.2.2.4, an import permit is required PEQ: Level 3A Minimum Period: 6 months

- a. Conditions for *Ralstonia pseduosolanacearum* Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*".
- b. Conditions for Xylella fastidiosa on tissue culture (section 2.2.2.5)
- c. Conditions for viruses
  - i) <u>Additional Declaration</u>: "[*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 Grapevine Pinot gris virus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The *Rosa* plants in this consignment were produced in a 'pest free area' for *Grapevine Pinot gris virus*".

#### OR

ii) "The *Rosa* plants in this consignment were produced in a 'pest free place of production' for *Grapevine Pinot gris virus*".

## Inspection, Testing and Treatment Requirements for Rosa

ORGANISM	MPI-ACCEPTED METHODS	Comments
Fungi		
Phellinus noxius	Refer to section 2.2.1.13 "Measures for <i>Phellinus noxius</i> "	Applies to whole plants only
Pucciniales	Treatment; refer to part A and B of the <i>Rosa</i> schedule	Applies to whole plants and non-dormant cuttings only
Bacteria		
Ralstonia pseudosolanacearum	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective media <b>OR</b> PCR	Applies to <i>Rosa</i> whole plants, cuttings, and tissue culture imported into a level 3A PEQ facility
Xylella fastidiosa	Refer to section 2.2.1.12 "Measures for <i>Xylella fastidiosa</i> "	Applies to whole plants and cuttings only. Testing requirements for <i>Xylella</i> <i>fastidiosa</i> are identified in section 2.2.1.12.
	Refer to section 2.2.2.5 "Measures for <i>Xylella fastidiosa</i> on tissue culture"	Applies to tissue culture only. Testing requirements for <i>Xylella fastidiosa</i> are identified in section 2.2.2.5.
Viruses		
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-approved facilities, or into Level 3B post entry quarantine from non-approved facilities.

## 2. Pests of *Rubus*

Refer to the pest list.

## **3.** Entry conditions for:

# **3.1** *Rubus* cuttings and tissue culture from offshore MPI-approved facilities in any country

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Rubus*, the approved 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) <u>Phytosanitary requirements</u>

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 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-approved facility].
   AND
- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved 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-approved facility].
   AND
- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved 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 approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests are required.

#### 3.2 Rubus cuttings and tissue culture from non-approved 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) <u>Phytosanitary requirements</u>

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 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 approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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 deflasked, and the deflasked 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/tests are required.

# Pest List for Rubus

#### **REGULATED PESTS (actionable)**

ects ecta	
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	laspoenty ealeborer
Batophila aerata	raspberry flea beetle
Batophila rubi	raspberry flea beetle
Brachypnoea exilis grita	flea beetle
Nodonota margaretae	leaf beetle
Curculionidae	lear beene
Anthonomus rubi	apple blossom weevil
	blossom weevil
Anthonomus signatus Marhymahitas higalar	rose curculio
Merhynchites bicolor Machanachites wich ami	
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	nuspoon j muge
Anthocoridae	
Orius vicinus	raanharry hua
Orius vicinus	raspberry bug

Miridae Lygocoris pabulinus Lygus lineolaris Macrolophus rubi Psallus variabilis Pentatomidae Dolycoris baccarum Pentatoma rufipes Homoptera Aetalionidae Aetalion reticulatum Aphididae Amphorophora agathonica Amphorophora idaei Amphorophora rubitoxica Aphis rubicola [vect.] Aphis ruborum *Macrosiphum funestum* Matsumuraja hirakurensis Cicadellidae Dikrella californica Dikrella cruentata Edwardsiana rosae Erythroneura rubiphylla *Macropsis fulcatus* Macropsis fuscula Metascarta impressifrons Typhlocyba spp. lssidae Mycterodus serbicus Psyllidae Trioza tripunctata Trioza trisignata Hymenoptera Cephidae Hartigia albomaculata Cynipidae Diastrophus spp. Pamphilidae Pamphilius sitkensis Pergidae Philomastix macleaii Tenthredinidae Allantus cinctus Emphytus calceatus Empria tridens Metallus pumilus Metallus rohweri Metallus rubi Monophadnoides geniculatus Perineura rubi Sterictiphora furcata Lepidoptera Geometridae Itame wauaria **Operophtera** bruceata Operophtera brumata Hepialidae Hepialus humuli Incurvariidae

common green caspid tarnished plant bug mirid mirid

stink bug forest bug

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strawberry aphid large raspberry aphid aphid raspberry aphid permanent blackberry aphid rose aphid raspberry aphid

blueberry leafhopper leafhopper leafhopper leafhopper boysenberry leafhopper leafhopper rubus leafhoppers

plant bug

blackberry psyllid psyllid

sawfly borer

stem gall cynipids

sawfly

bramble sawfly

banded rose sawfly sawfly raspberry sawfly raspberry leaf-mining sawfly raspberry leafmining sawflies blackberry leafminer raspberry sawfly sawfly sawfly

v-moth Bruce spanworm European winter moth

ghost swift moth

Lampronia rubiella Lymantriidae Euproctis chrysorrhoea Lymantria dispar Orgyia antiqua Megalopygidae Megalopyge lanata Nepticulidae Stigmella aurella Stigmella splendidissimella Noctuidae Acronicta psi Agrotis segetum Cosmia trapezina Eudocima tyrannus Graphiphora augur Melanchra persicariae Oraesia emarginata Papaipema nebris Peridroma saucia Spirama retorta Xestia c-nigrum Notodontidae Phalera bucephala Saturniidae Saturnia pavonia Sesiidae Pennisetia hylaeiformis Pennisetia marginata Synanthedon bibionipennis Tortricidae Acleris comariana Acleris laterana Archips oporanus Argyrotaenia citrana Choristoneura rosaceana Cnephasia longana Epiblema uddmanniana Olethreutes concinnana Olethreutes furfuranum Pandemis cerasana Spilonota ocellana Orthoptera Gryllidae Oecanthus nigricornis Oecanthus pellucens Phasmida Phasmatidae Carausius morosus **Thysanoptera** Thripidae Thrips flavus Mites Arachnida Acarina Eriophyidae Cenopalpus pseudospinosus Epitrimerus gibbosus Eriophyes rubi

raspberry bud moth

brown-tail moth Asian gypsy moth rusty tussock moth

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grey dagger moth turnip moth dun-bar moth Akebia leaf-like moth double dart moth dot moth fruit-piercing moth stalk borer variegated cutworm fruit sucking moth spotted cutworm

buff-tip moth

silk moth

raspberry crownborer raspberry crownborer strawberry crown moth

leafroller broad barred button moth fruit tree tortix orange tortix obliquebanded leafroller omnivorous leaftier bramble shoot borer leafroller leafroller leafroller eye-spotted bud moth

blackhorned tree cricket blackhorned tree cricket

wingless stick insect

flower thrips

rust mite eriophyid mite 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	anna hliabh
Leptosphaeria thomasiana Melanconidaceae	cane blight
Sydowiella depressula <b>Mycosphaerellaceae</b>	-
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	cane spot
Monilinia fructigena (anamorph Monilia fructigena)	brown rot
Meliolales	
Meliolaceae	
Appendiculella calstroma	black mildew
Unknown Ascomycetes	
•	
Hormotheca rubicola	-

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	<i>y c</i>
Gerwasia epiphylla	-
Basidiomycota: Urediniomycetes	
Stereales	
Sistotremataceae	
Phymatotrichopsis omnivora	Texas root rot
Uredinales	10/10/100/100
Phragmidiaceae	
Arthuriomyces peckianus	orange rust
Gymnoconia nitens	rust
Hamaspora longissima	sub-tropical rust
Phragmidium alaskanum	sub-dopical fust
Phragmidium bulbosum	- rust
Phragmidium occidentale	Tust
Puragmatum occiaentale Pucciniastraceae	-
Pucciniastraceae Pucciniastrum americanum	late leaf rust
	late leaf fust
Pucciniastrum arcticum Mitograpia Funci (Coolomyoptos)	-
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
	1000100
Bacteria	
-	
Enterobacteriaceae	
Erwinia amylovora f.sp. rubi	
Rhizobiaceae	
Agrobacterium rubi	cane gall
Xanthomonadaceae	8
Xylella fastidiosa	Pierce's disease
	- 10100 5 0150050

#### Viruses

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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

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#### Phytoplasmas

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Black raspberry witches'-broom phytoplasma	-
Rubus stunt phytoplasma	-

#### Disease of unknown aetiology

Alpine mosaic agent	-
Black raspberry streak disease	-
Raspberry chlorotic net disease	-
Raspberry yellow spot disease	-

# Inspection, Testing and Treatment Requirements for Rubus

ORGANISM TYPES	MPI-ACCEPTED METHODS	
Mites	Visual inspection <b>AND</b> approved miticide treatments as described in the section 2.2.1.6 of the Basic conditions [cuttings only] <b>or</b> 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	Country freedom <b>OR</b>	
not in New Zealand]	Graft indexing using Rubus occidentalis and PCR	
Blackberry calico virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )	
Blackberry chlorotic ringspot virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> ) <b>and</b> PCR	
Blackberry virus Y	Country freedom <b>OR</b> RT-PCR using BVY-specific primers	
Blackberry yellow vein associated virus	Country freedom <b>OR</b> PCR	
Bramble yellow mosaic virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )	
Cherry rasp leaf virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa, Cucumis sativus,</i> and <i>Nicotiana clevelandii</i> ) and ELISA or PCR	
Hawaiian rubus leaf curl virus	Country freedom <b>OR</b> Growing season inspection for symptom expression	
Raspberry latent virus	Country freedom <b>OR</b> PCR	
Raspberry leaf curl virus	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i>	
Raspberry ringspot virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa, Cucumis sativus,</i> and <i>Nicotiana clevelandii</i> ) <b>and</b> ELISA <b>or</b> PCR	
Rubus Chinese seedborne virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa, Cucumis sativus,</i> and <i>Nicotiana clevelandii</i> )	
Rubus chlorotic mottle virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )	
Rubus yellow net virus	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i> <b>and</b> PCR	
Thimbleberry ringspot virus	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i>	
<i>Tobacco necrosis virus</i> [strains not in New Zealand]	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa, Cucumis sativus</i> and <i>Nicotiana clevelandii</i> )	

Tomato ringspot virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa, Cucumis sativus,</i> and <i>Nicotiana clevelandii</i> ) and ELISA or PCR	
Wineberry latent virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )	
Phytoplasmas		
Black raspberry witches'-broom phytoplasma	Country freedom <b>OR</b> Nested PCR <b>or</b> real time PCR using universal phytoplasma primers	
Rubus stunt phytoplasma	Country freedom <b>OR</b> Nested PCR <b>or</b> real time PCR using universal phytoplasma primers	
Diseases of unknown aetiology		
Alpine mosaic agent	Country freedom <b>OR</b> Growing season inspection for symptom expression	
Black raspberry streak disease	Country freedom <b>OR</b> Growing season inspection for symptom expression	
Raspberry chlorotic net disease	Country freedom <b>OR</b> Growing season inspection for symptom expression	
Raspberry yellow spot disease	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i>	

#### Notes:

- 1. **Country freedom** for regulated viruses, diseases of unknown aetiology, and phytoplasmas will only be accepted when material is sourced from an MPI-approved offshore facility. Country freedom must be endorsed by the exporting NPPO, and must be included in the agreement between MPI and the approved 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 greenhouse approved to facility standard PEQ.STD Post Entry Quarantine for Plants, 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

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 18-25°C 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, 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 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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 As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2. PLUS

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, 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) <u>Documentation</u>

**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) <u>Phytosanitary requirements</u>

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) <u>Additional declarations to the phytosanitary certificate</u> 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) <u>Special tissue culture media requirements</u>

The tissue culture media must not contain charcoal.

#### (iii) <u>Phytosanitary requirements</u>

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**: Columnea latent viroid, Potato spindle tuber viroid, Tomato apical stunt viroid, Tomato chlorotic dwarf 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

a. Conditions for *Columnea latent viroid* **Note:** Only applies to the following species: *Brunfelsia undulata, Gloxinia gymnostoma* and *Nematanthus wettsteinii* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Columnea latent viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Columnea latent viroid*".

#### OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".
- b. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".
- c. Conditions for *Tomato apical stunt viroid* **Note:** Only applies to the *Cestrum* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato apical stunt viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato apical stunt viroid*".

#### OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".
- d. Conditions for Tomato chlorotic dwarf viroid

Note: Only applies to the Calibrachoa genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".

#### **B. For Tissue Cultures** As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2. **PLUS**

a. Conditions for *Columnea latent viroid* **Note:** Only applies to the following species: *Brunfelsia undulata, Gloxinia gymnostoma* and *Nematanthus wettsteinii* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Columnea latent viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Columnea latent viroid*".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Columnea latent viroid* during the quarantine period.

b. Conditions for *Tomato apical stunt viroid* **Note:** Only applies to the *Cestrum* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato apical stunt viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato apical stunt viroid*".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Tomato apical stunt viroid* during the quarantine period.

c. Conditions for Potato spindle tuber viroid

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Potato spindle tuber viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*".

#### OR

iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

d. Conditions for Tomato chlorotic dwarf viroid

Note: Only applies to the Calibrachoa genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

iii)Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Tomato chlorotic dwarf viroid* during the quarantine period.

## Inspection, Testing and Treatment Requirements for Solanum

ORGANISM	MPI-ACCEPTED METHODS	Comments
Viroids		
Columnea latent viroid	PCR based methods	Only applies to <i>Brunfelsia</i> <i>undulata</i> , <i>Gloxinia</i> <i>gymnostoma</i> and <i>Nematanthus wettsteinii</i> whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility
Potato spindle tuber viroid	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility
Tomato apical stunt viroid	PCR based methods	Only applies to <i>Cestrum</i> whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility
<i>Tomato chlorotic dwarf viroid</i>	PCR based methods	Only applies to <i>Calibrachoa</i> whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Columnea latent viroid*, *Potato spindle tuber viroid*, *Tomato apical stunt viroid* and *Tomato chlorotic dwarf viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

## Solanum tuberosum

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

# **1.** Type of *Solanum tuberosum* nursery stock approved for entry into New Zealand Plants in tissue culture

*Solanum tuberosum* can be imported into New Zealand as plants in tissue culture from any country.

#### 2. Pests of Solanum tuberosum

Refer to the pest list.

#### **3.** Entry conditions for:

# **3.1** *Solanum tuberosum* plants in tissue culture from offshore MPI-approved 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) <u>Special tissue culture medium requirements</u>

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-approved facility.
   AND
- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved 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-approved facility];
 AND

- have been held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved 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 approved by MPI for testing/treatment purposes. This applies to MPI-approved 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-approved 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) <u>Special tissue culture medium requirements</u>

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/tests are required.

# 4. Validation of test results and audit of treatments at MPI-approved 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 approved by MPI for testing/treatment purposes. This applies to MPI-approved 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
Enerse :	
Fungi Chatai di amang ta	
Chytridionycota	
Chytridiales	
Synchytriaceae	
Synchytrium endobioticum [official control]	potato wart
Mitosporic Fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	nhomo loof anot
Phoma andigena var. andina Mitamaria Funci	phoma leaf spot
Mitosporic Fungi Unhangana Mitographic Fungi	
Unknown Mitosporic Fungi	
Unknown Mitosporic Fungi	deferme in a meat
Aecidium cantensis	deforming rust
Oomycota	
Peronosporales	
Peronosporaceae	Construction Construction
Phytophthora capsici	fruit rot of peppers
Phytophthora infestans [A2 mating strain]	late blight
Phytophthora palmivora	black rot
Bacteria	
Burkholderiaceae	
Ralstonia pseudosolanacearum	bacterial wilt of potatoes
(formerly <i>R. solanacearum</i> race 1)	
Corynebacteriaceae	
Clavibacter michiganensis subsp. sepedonicus	potato ring rot
Enterobacteriaceae	potato ring rot
Dickeya chrysanthemi pv. chrysanthemi	bacterial soft rot
(syn. Erwinia chrysanthemi pv. chrysanthemi)	
Dickeya chrysanthemi pv. parthenii	-
(syn. Erwinia chrysanthemi pv. parthenii)	
Dickeya paradisiaca	-
(syn. Erwinia chrysanthemi pv. paradisiaca)	
<i>(Sym El minia em ysammenn pri paraaistaea)</i> <i>Dickeya solani</i> '	-
Pectobacterium betavasculorum	bacterial sudden yellows death
(syn. Erwinia carotovora subsp. betavasculorum)	Successing Successing Series as a count
Pectobacterium polaris	
Pseudomonadaceae	
Xylella fastidiosa	
Phyllobacteriaceae	
<i>Candidatus</i> Liberibacter solanacearum' haplotype B	
1 91	
Viroids	
Columnea latent viroid*	
Pepper chat fruit viroid*	-
Potato spindle tuber viroid [transient]	

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Tomato chlorotic dwarf viroid\*

Tomato planta macho viroid\*

#### Viruses

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 H 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 mosale begomovirus Tomato yellow vein streak begomovirus*	_
Wild potato mosaic potyvirus	-
πια ροιαίο ποsαίε ροιγνιτάς	-
Phytoplasmas	
Phytoplasmas Columbia basin purple top phytoplasma	

Columbia basin purple top phytoplasma 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	MPI-ACCEPTED METHODS	Comments
Mites	Binocular microscope inspection.	
Fungi	Binocular interoscope inspection.	
Aecidium cantensis	Growing season inspection in PEQ for	
neetuum cumensis	symptom expression	
Phoma andigena var. andina	Growing season inspection in PEQ for	
	symptom expression	
Synchytrium endobioticum	Growing season inspection in PEQ for	<i>S. endobioticum</i> cannot be
[official control]	symptom expression	cultured. It is identified by
		microscopic examination of
		affected plants. This organism
		belongs to the Myxomycetes in
		the Kingdom Protozoa.
Oomycetes		
Phytophthora capsici	Growing season inspection in PEQ for	
	symptom expression	
Phytophthora infestans (A2	Growing season inspection in PEQ for	
mating strain)	symptom expression	
Phytophthora palmivora	Growing season inspection in PEQ for	
	symptom expression	
Bacteria	1	
'Candidatus Liberibacter	Growing season inspection in PEQ for	
solanacearum' haplotype B	symptom expression AND PCR	
Clavibacter michiganensis subsp.	Growing season inspection in PEQ for	
sepedonicus	symptom expression AND	
	Immunofluorescence	
	or	
	• ELISA <b>AND</b> grow plantlets on	
	Murashige and Skoog medium	
	PCR AND grow plantlets on Murachiae and Skoog medium	
Dickeya chrysanthemi pv.	Murashige and Skoog medium Growing season inspection in PEQ for	
chrysanthemi	symptom expression <b>AND</b> plating on	
chi ysaninemi	selective pectate media or PCR	
Dickeya chrysanthemi pv.	Growing season inspection in PEQ for	
parthenii	symptom expression <b>AND</b> plating on	
	selective pectate media <b>or</b> 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 or PCR	
Pectobacterium polaris	Growing season inspection in PEQ for	
	symptom expression <b>AND</b> plating on	
	selective pectate media or PCR	
Ralstonia pseudosolanacearum	Growing season inspection in PEQ for	
(formerly <i>R. solanacearum</i> race	symptom expression,	
1)	AND plating on selective media	
Vylalla fastidiosa	OR PCR Growing season inspection in PEQ for	
Xylella fastidiosa	symptom expression <b>AND</b> PCR	
	symptom expression AIND FCK	

ORGANISM TYPES	MPI-ACCEPTED METHODS	Comments
Viroids		
Potato spindle tuber viroid	PCR using two sets of primers	
[transient]	or Return PAGE (with silver staining) or	
	Hybridisation (P32 or digoxigenin	
	labelled RNA probes)	
Viruses		
Arracacha B nepovirus	ELISA or PCR AND herbaceous	Sap transmitted with difficulty.
	indicators Ca	ELISA must detect the oca strain
Andean potato latent tymovirus	ELISA or PCR AND herbaceous	
	indicators Nb, No	
Andean potato mild mosaic	ELISA or PCR	
tymovirus		
Andean potato mottle comovirus	ELISA or PCR AND herbaceous	
	indicators Nc, Nd	
Beet curly top curtovirus	ELISA or PCR	
Eggplant mottled dwarf	Herbaceous indicators Nb, Nc, Nd	
nucleorhabdovirus		
Papaya mosaic potexvirus	PCR and Herbaceous indicator Ca	
Pepino mosaic virus	PCR and Herbaceous indicators Nd, No,	
Deteta 14D to barrens	and Nt	Net Caller also as standard 1
Potato 14R tobamovirus	Growing season inspection in PEQ for	Not fully characterised.
Detete block ringer at a second	symptom expression ELISA or PCR AND herbaceous	
Potato black ringspot nepovirus		
Detate deferming massis	indicators Cq, No PCR or ELISA	
Potato deforming mosaic begomovirus	PCR OF ELISA	
Potato latent carlavirus	PCR	
Potato mop-top furovirus	ELISA or PCR AND herbaceous	ELISA can be used to detect the
Potato mop-top furovirus	indicators Ca, Cq, Nd	virus in indicator plants but may
	indicators Ca, Cq, Nd	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	
i otato i uionoviitas		
	indicators Ca, Cq	
Potato virus H carlavirus	indicators Ca, Cq PCR	
Potato virus H carlavirus Potato virus U nepovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ]	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt PCR or hybridisation	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus Potato yellow ing alfamovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt PCR or hybridisation ELISA or PCR	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus Potato yellow vein crinivirus Potato yellowing alfamovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt PCR or hybridisation ELISA or PCR Growing season inspection in PEQ for	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus Potato yellow vein crinivirus Potato yellowing alfamovirus Solanum apical leaf curling begomovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt PCR or hybridisation ELISA or PCR Growing season inspection in PEQ for symptom expression	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus Potato yellow vein crinivirus Potato yellowing alfamovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt PCR or hybridisation ELISA or PCR Growing season inspection in PEQ for symptom expression Growing season inspection in PEQ for	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus Potato yellowing alfamovirus Solanum apical leaf curling begomovirus Solanum yellows luteovirus	<ul> <li>indicators Ca, Cq</li> <li>PCR</li> <li>Herbaceous indicators Ca, Cq</li> <li>ELISA or PCR</li> <li>ELISA or PCR AND herbaceous indicators Nb, No</li> <li>Herbaceous indicators Nc</li> <li>Herbaceous indicators Nb, Nt</li> <li>PCR or hybridisation</li> <li>ELISA or PCR</li> <li>Growing season inspection in PEQ for symptom expression</li> <li>Growing season inspection in PEQ for symptom expression</li> </ul>	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus Potato yellow vein crinivirus Potato yellowing alfamovirus Solanum apical leaf curling begomovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt PCR or hybridisation ELISA or PCR Growing season inspection in PEQ for symptom expression Growing season inspection in PEQ for symptom expression Growing season inspection in PEQ for symptom expression	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus Potato yellow vein crinivirus Potato yellowing alfamovirus Solanum apical leaf curling begomovirus Solanum yellows luteovirus Southern potato latent carlavirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt PCR or hybridisation ELISA or PCR Growing season inspection in PEQ for symptom expression Growing season inspection in PEQ for symptom expression Growing season inspection in PEQ for symptom expression	
Potato virus H carlavirus Potato virus U nepovirus Potato virus V potyvirus Potato virus Y potyvirus [strains not in NZ] Potato yellow dwarf nucleorhabdovirus Potato yellow mosaic begomovirus Potato yellow vein crinivirus Potato yellowing alfamovirus Solanum apical leaf curling begomovirus Solanum yellows luteovirus	indicators Ca, Cq PCR Herbaceous indicators Ca, Cq ELISA or PCR ELISA or PCR AND herbaceous indicators Nb, No Herbaceous indicators Nc Herbaceous indicators Nb, Nt PCR or hybridisation ELISA or PCR Growing season inspection in PEQ for symptom expression Growing season inspection in PEQ for symptom expression Growing season inspection in PEQ for symptom expression	Tobacco necrosis virus A

ORGANISM TYPES	MPI-ACCEPTED METHODS	Comments
Tobacco rattle tobravirus [strains	PCR AND herbaceous indicators Ca, Nc	Serological detection is
not in New Zealand]		unreliable because of diversity in
		the particle proteins of different
		isolates.
Tobacco streak ilarvirus [strains	Herbaceous indicators Nt	Potato strain SB10 infects potato
not in New Zealand]		naturally.
Tomato infectious chlorosis	PCR	
crinivirus		
Tomato leaf curl begomovirus –	Herbaceous indicators Nb	Potato leaf curl is a new disease
New Delhi		in northern India caused by a
		strain of Tomato leaf curl new
		Delhi virus.
Tomato yellow leaf curl	PCR or ELISA	
begomovirus		
Tomato yellow mosaic	PCR or ELISA AND herbaceous	
begomovirus	indicators Nb, Nt	
Wild potato mosaic potyvirus	Herbaceous indicators Nc, No	
Phytoplasmas	1	
Columbia basin purple top	Nested or real-time PCR using universal	
phytoplasma	phytoplasma primers	
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	
<b>D</b>	phytoplasma primers	
Potato purple-top roll	Nested or real-time PCR using universal	
phytoplasma	phytoplasma primers	
Potato purple-top wilt	Nested or real-time PCR using universal	
phytoplasma	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	
Detete to be all as any	phytoplasma primers	
Potato witches' broom	Nested or real-time PCR using universal	
phytoplasma	phytoplasma primers	An unimourn phytoplasma an l
Saq'O disease	Growing season inspection in PEQ for	An unknown phytoplasma and a
	symptom expression	native strain of Potato leafroll
		virus (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* <u>experimentally</u>. Tests that would detect these pathogens are already being conducted elsewhere in this schedule.

ORGANISM TYPES	Comments
	No evidence that this viroid infects potato
	naturally.
Pepper chat fruit viroid	No evidence that this viroid infects potato
	naturally.

Tomato chlorotic dwarf viroid*	
I omato chlorotic dwarf viroid*	Tests that would detect this viroid are already
	being conducted elsewhere in this schedule e.g.
	the herbaceous indicator Nd.
Tomato planta macho viroid*	No evidence that this viroid infects potato
	naturally (Galindo <i>et al.</i> 1982).
Abutilon mosaic begomovirus*	Tests that would detect this virus are already
	being conducted elsewhere in this schedule e.g.
	the universal PCR or ELISA tests for
	begomoviruses.
Arracacha A nepovirus*	Tests that would detect this virus are already
	being conducted elsewhere in this schedule, e.g.
	the herbaceous indicators Cq and Nc.
Asparagus 3 potexvirus*	Tests that would detect this virus are already
	being conducted elsewhere in this schedule, e.g.
	the indicator Cq and Nc.
Cassava green mottle nepovirus*	Tests that would detect this virus are already
	being conducted elsewhere in this schedule, e.g.
	the herbaceous indicators Cq and Nc.
Cassia mild mosaic carlavirus*	Tests that would detect this virus are already
	being conducted elsewhere in this schedule, e.g.
	the universal PCR for carlaviruses.
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
1 2	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
romato rear curr ocgomovirus - Austrand	being conducted elsewhere in this schedule e.g.
	the universal PCR or ELISA for begomovirus.
	the universal LER of ELISA for Degomovitus.

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; 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.
- Herbaceous indicator hosts (Cq Chenopodium quinoa, Nd Nicotiana debneyi, 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 amaranticolor, 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 - <u>https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard</u>),

(Insert 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 the nursery stock 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 - <u>https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard</u>),

(Insert 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 <b>Exporter</b> and Company Name (details) and	Signed by Importer and Company Name (details) and
date	date

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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for Aster yellows phytoplasma

<u>Additional declaration</u>: "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**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEO</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for Aster yellows phytoplasma

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 2Minimum Period: 3 monthsAdditional 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 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 *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

**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

- a. Conditions for Puccinia gladioli
  - i) "*Puccinia gladioli* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]".

#### OR

ii) "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, United States of America

OPTION 1: No import permit is required PEQ: None Cleanliness: Bulbs (corms) must be free of leafy coverings.

a. 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 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, United States of America

OPTION 1: PEQ: Level 1 Minimum Period: 3 months Cleanliness: Bulbs (corms) must be free of leafy coverings.

a. 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 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

Plants in tissue culture

### 2. Pests of Tulipa

Refer to the pest list.

#### **3. Entry conditions for:**

#### 3.1 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) <u>Phytosanitary requirements</u>

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.

#### **3.2** *Tulipa* dormant bulbs from any country <u>other than</u> 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:** an import permit is required.

#### (ii) <u>Phytosanitary requirements</u>

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/tests 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 an MPI Inspector.

#### 3.3 Tulipa plants in tissue culture from any country

#### (i) <u>Documentation</u>

**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) <u>Phytosanitary requirements</u>

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/tests 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 PlantsPEQ: Level 3BMinimum 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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

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

As per section 2.2.2.4, an import permit is required 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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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-approved facilities in any country

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. The operator of the approved 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 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-approved facility].
   AND
- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved 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-approved facility].
   AND
- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification."

#### (iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

#### (v) *Post-entry quarantine*

**PEQ**: All *Vaccinium* nursery stock must be imported under permit into post-entry quarantine in a level 2 quarantine facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests are required.

#### 3.2 Vaccinium cuttings from non-approved 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) <u>Phytosanitary requirements</u>

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 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.
   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* cuttings must be imported under permit into post-entry quarantine in a level 3B quarantine facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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. 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/tests are required.

#### 3.3 Vaccinium tissue cultures from non-approved 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* 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

- held in a manner to ensure that infestation/reinfestation does not occur following certification.
  - AND
- [for countries recognised by MPI as free of *Phytophthora ramorum*] have been sourced from a country recognised by MPI as being free from *Phytophthora ramorum*.

**Guidance for importers:** Freedom from *Phytophthora ramorum* is an optional measure that may be applied to tissue cultures that will undergo quarantine in a level 3A quarantine facility.

(iii) Additional declarations to the phytosanitary certificate

The following additional declaration can be included for countries recognised by MPI as being free from *Phytophthora ramorum*:

"The *Vaccinium* tissue cultures in this consignment have been sourced from a 'pest Free Area' free from *Phytophthora ramorum*".

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(iv) Special tissue culture medium requirements
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The tissue culture medium must not contain charcoal.

#### (v) *Post-entry quarantine*

**PEQ**: All *Vaccinium* tissue cultures must be imported into post entry quarantine in a level 3A or level 3B quarantine facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

#### Special requirements for plants imported into a level 3A quarantine facility:

- Before plants are deflasked into a level 3A quarantine facility the tissue cultures must be held at a level 3 tissue culture laboratory until the following activities have been completed:
  - Tissue cultures must be held between 17°C and 25°C for a minimum period of four weeks and all plants must be inspected by the MPI inspector for signs or symptoms of *Phytophthora ramorum* prior to deflasking. This inspection will be in addition to growing season inspections which are required in the greenhouse. This is only required for plants which do not have an additional declaration certifying they have been sourced from a country recognised by MPI as being free from *Phytophthora ramorum*.
  - Sub culturing must not occur during this incubation period however plants may be sub-cultured on arrival in New Zealand, prior to commencement of the four-week incubation.
  - Tissue cultures must not be transferred to the level 3A quarantine facility until they have been tested for and found free from *Monilinia vaccinii-corymbosi*.
- Requirements at the level 3A quarantine facility:
  - All plants must be inspected for signs and symptoms of pests and disease at least twice per week throughout the entire quarantine period (including during dormancy).
  - Plants must be irrigated using a method which prevents water coming into contact with plant foliage (such as drip irrigation). Overhead irrigation must not be used.
  - Contingency plans must be developed to identify actions that will be taken to contain the propagules of any fungal or oomycete disease organisms in the event of disease symptoms becoming evident during the quarantine period. These plans must be recorded in the facility operating manual.

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

The imported tissue culture plants must be deflasked and grown for a minimum period of 9 months in post-entry quarantine. During this time plants 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. This time is the indicative minimum quarantine period and may be extended if material is slow growing, pests are detected, or treatments/tests are required.

#### Guidance:

Imports of *Vaccinium* under this section are required to go into level 3B PEQ, unless an importer opts for level 3A. When an importer opts into level 3A PEQ the special requirements for plants imported into a Level 3A quarantine facility must be complied with.

### 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	Ĩ
Acronicta tritona	acronicta caterpillar
Actebia fennica	black army cutworm
Notodontidae	2
Datana major	azalea caterpillar
Pyralidae	1
Acrobasis vaccinii	cranberry fruitworm
Sphingidae	j a ta j
Paonias astylus	huckleberry sphinx
Tortricidae	J I I I I I I I I I I I I I I I I I I I
Archips rosanus	rose leafroller
Argyrotaenia velutinana	red-banded leafroller
Aroga trialbamaculella	leaftier
Cheimophila salicella	European carnation tortrix
Choristoneura hebenstreitella	tortricid
C.10115101101110110110110110110110110	10111111

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	
	twig blight
Diaporthe vaccinii (anamorph Phomopsis vaccinii) Dothideales	twig blight
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	root and stem rot
crotalariae)	
Leotiales	
Leotiaceae	
Godronia cassandrae (anamorph Fusicoccum	foliage spot
putrefaciens)	
Godronia cassandrae f. sp. vaccinii	cane canker
Sclerotiniaceae	
Monilinia baccarum	mummy berry
Monilinia fructigena (anamorph Monilia fructigena) Monilinia ledi	European brown rot twig blight
Monilinia megalospora	-
Monilinia oxycocci	-
Monilinia urnula	brown rot
Monilinia vaccinii-corymbosi	brown rot
Phyllachorales	
Phyllachoraceae	0
Ophiodothella vaccinii	fly speck leaf spot
Meliolaes	
Meliolaceae Asteridiella exilis	black mildew
Asterialena exilis Rhytismatales	DIACK IIIIUEW
Rhytismataceae	
axiiy tishilatawaa	

I and a dama in the second allows	
Lophodermium hypophyllum Lophodermium maculare	- leaf spot
Rhytisma vaccinii	tar leaf spot
Basidiomycota: Basidiomycetes	tui ieui spot
Agaricales	
Tricholomataceae	
Armillaria mellea (anamorph Rhizomorpha subcorticalis)	armillaria root rot
Armillaria ostoyae	armillaria root rot
Exobasidiales	
Exobasidiaceae	
Exobasidium maculosum	
Basidiomycota: Teliomycetes	
Uredinales	
Pucciniastraceae	much
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	leaf an at an distant samban
Gloeosporium minus Leptothyrium conspicuum	leaf spot and stem canker fly speck
Leptothyrium conspicuum mitosporic fungi (Hyphomycetes)	ny speck
Hyphomycetales	
Moniliaceae	
Gloeocercospora inconspicua	leaf spot
Ramularia vaccinii	leaf spot
unknown Hyphomycetes	1
unknown Hyphomycetes	
Aureobasidium vaccinii	twig and leaf blight
Bacterium	
Burkholderiaceae	
Ralstonia pseudosolanacearum	Bacterial wilt
(formerly Ralstonia solanacearum race 1, Phylotype I) Pseudomonadaceae	
Xylella fastidiosa	Pierce's disease
Rhizobiaceae	Tierce's disease
Agrobacterium rubi	cane gall
	cuite guit
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	-
<i>Tobacco streak virus</i> [strains not in New Zealand]	-
Tomato ringspot virus	-

Phytoplasma	
Blueber	ry stunt phytoplasma
Cranber	ry false blossom phytoplasma
Vaccini	um witches' broom phytoplasma
Disease of un	known aetiology
Blueber	ry fruit drop disease

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### Inspection, Testing and Treatment Requirements for Vaccinium

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
Fungi	Growing season inspection in PEQ for disease symptom expression
Diaporthe vaccinii	Plating of twig or leaf material onto suitable isolation medium
Monilinia vaccinii-corymbosi	Growing season inspection in PEQ for disease symptom expression <b>AND</b> [for tissue cultures which will be deflasked into a level 3A quarantine facility, option 3.3 of the <i>Vaccinium</i> schedule only]; one of the following tests must occur before the tissue cultures are transferred to the quarantine facility: PCR or plating onto suitable isolation medium.
Oomycota	
Phytophthora ramorum	Growing season inspection in PEQ for disease symptom expression <b>AND</b> [for tissue cultures which were not certified as sourced from a country free from <i>P. ramorum</i> , and which will be deflasked into a level 3A quarantine facility under option 3.3 of the <i>Vaccinium</i> schedule]: Tissue cultures must be held in a level 3 tissue culture facility between 17°C and 25°C for a minimum period of four weeks, and inspected by the MPI inspector before transfer to the greenhouse.
Bacteria	
Agrobacterium rubi	Growing season inspection in PEQ for disease symptom expression
Ralstonia pseudosolanacearum	Growing season inspection in PEQ for disease symptom expression,
(formerly R. solanacearum race 1)	AND plating on selective media or PCR using DNA from plant stem
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Viruses	
Blueberry leaf mottle virus	Herbaceous indicators Cq and Nc AND ELISA or PCR
Blueberry 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
<i>Tobacco streak virus</i> [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	Nested PCR or real time PCR using universal phytoplasma primers
phytoplasma	
Vaccinium witches' broom phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers
Diseases of unknown aetiology	
Blueberry fruit drop disease	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 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. Note: plants held in a level 3A quarantine facility under option 3.3 of the IHS must be inspected at least twice per week for the entire quarantine period (including during any periods of dormancy).
- 7. With prior notification, MPI will accept other internationally recognised testing methods.

#### Vaccinium macrocarpon

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

## **1.** Type of *Vaccinium macrocarpon* nursery stock approved for entry into New Zealand Cuttings (dormant); Plants in tissue culture

#### 2. Pests of Vaccinium macrocarpon

Refer to the pest list.

#### 3. Entry conditions for:

### **3.1** *Vaccinium macrocarpon* cuttings and tissue culture from offshore MPI-approved facilities in any country

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. The operator of the approved 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-approved facility]
   AND
- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved 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-approved facility].
   AND
- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification."

#### (iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

#### (v) <u>Post-entry quarantine</u>

**PEQ**: All *Vaccinium macrocarpon* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests are required.

## **3.2** *Vaccinium macrocarpon* cuttings and tissue culture from non-approved 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 approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests are required.

### Pest List for Vaccinium macrocarpon

#### **REGULATED PESTS (actionable)**

Insect	
Insecta	
Coleoptera	
Chrysomelidae	and the sum of the sum
Rhabdopterus picipes Curculionidae	cranberry rootworm
	i1
Anthonomus musculus	cranberry weevil
Pseudanthonomus validus	currant fruit weevil
Scarabaeidae	Teners to the set
Popillia japonica	Japanese beetle
Diptera Traducti la c	
Tephritidae	1
Rhagoletis pomonella	apple maggot fly
Homoptera	
Aphididae	11 1
Aphis vaccinii	blueberry aphid
Illinoia borealis	aphid
Cicadellidae	
Euscelis striatulus	Blunt-nosed leafhopper
Hymenoptera Traductive distance	
Tenthredinidae	· · · · · · · · · · · · · · · · · · ·
Pristiphora idiota	willow redgall sawfly
Lepidoptera	
Arctiidae	6.11
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	4 1.11.14
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	foliage spot
putrefaciens)	ionage spor
Godronia cassandrae f. sp. vaccinii	cane canker
Sclerotiniaceae	cane canker
Monilinia fructigena (anamorph Monilia fructigena)	Furanaan brown rot
	European brown rot
Monilinia oxycocci	-
Rhytismatales	
Rhytismataceae	
Lophodermium hypophyllum	-
Lophodermium maculare	leaf spot
Lophodermium oxycocci	-
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
Armillaria mellea (anamorph Rhizomorpha	armillaria root rot
subcorticalis)	
Basidiomycota: Teliomycetes	
Uredinales	
Pucciniastraceae	
Pucciniastrum goeppertianum	rust
Chytridiomycota	
Chytridiales	
Synchytriaceae	
Synchytrium vaccinii	red leaf gall
Mitosporic fungi (Coelomycetes)	C
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	ny speek
Pythiales	
-	
Pythiaceae	Sudden Oak Death disease
Phytophthora ramorum	Sudden Oak Death disease
Bacterium	
Pseudomonadaceae	
Xylella fastidiosa	
Rhizobiaceae	
Agrobacterium rubi	cane gall
Agrobacterium rubi	cane gan
Virus	
Blueberry scorch virus	
Bluberry red ringspot virus (syn. Cranberry ringspot	-
virus)	
<i>Tobacco streak virus</i> [strains not in New Zealand]	-
Les de construit and Les anno not in 1000 Ecaland	

#### Phytoplasma

Cranberry false blossom phytoplasma

# Inspection, Testing and Treatment Requirements for *Vaccinium macrocarpon*

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
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 macrocarpon* 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**: *Phytophthora tentaculata, Tetranychus kanzawai, Tomato chlorotic dwarf viroid,* 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 Phytophthora tentaculata

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".
- b. Conditions for *Tomato chlorotic dwarf viroid* One of the following Additional Declarations must be endorsed on the phytosanitary certificate:
  - i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Verbena*".
- c. Conditions for Uredinales <u>Additional declaration</u>: "Rust diseases are not known to occur on \_\_\_\_\_[the imported genus] in \_\_\_\_\_[the country in which the plants were grown]".

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

**Guidance for importers:** The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

#### **B.** For Tissue Cultures

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

#### PLUS

a. Conditions for *Tomato chlorotic dwarf viroid* One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

#### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Verbena*"
   Guidance for importers: Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Tomato chlorotic dwarf viroid* during the quarantine period.
- b. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

#### Inspection, Testing and Treatment Requirements for Verbena

ORGANISM	MPI-ACCEPTED METHODS	Comments
Bacteria		
Xylella fastidiosa	Refer to section 2.2.1.12 "Measures for <i>Xylella fastidiosa</i> "	Applies to whole plants, cuttings only. Testing requirements for <i>Xylella</i> <i>fastidiosa</i> are identified in section 2.2.1.12
	Refer to section 2.2.2.5 "Measures for <i>Xylella fastidiosa</i> on tissue culture"	Applies to tissue culture only. Testing requirements for <i>Xylella fastidiosa</i> are identified in section 2.2.2.5
Viroids		
Tomato chlorotic dwarf viroid	PCR based method	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Tomato chlorotic dwarf viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

#### Veronica (formerly Hebe)

**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 *Veronica*", 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 capsici, Phytophthora palmivora, Phytophthora tentaculata, Xylella fastidiosa* 

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

A. For Whole PlantsPEQ: Level 2Minimum Period: 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> 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 speciosa*, *Lagerstroemia subcostata*, *Ligustrum japonicum*, *Liquidambar formosana* and *Pistacia chinensis*
- c. Conditions for *Phytophthora capsici* **Note:** Only applies to the following genera: *Abelmoschus*, *Hibiscus*, *Lavandula* and *Pistacia*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- d. Conditions for *Phytophthora palmivora*

**Note:** Only applies to the following genera: *Abelmoschus*, *Catharanthus*, *Coronilla*, *Dodonaea*, *Euphorbia*, *Grevillea*, *Hibiscus*, *Lavandula* and *Pistacia* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

e. Conditions for *Phytophthora tentaculata* **Note:** Only applies to the following genera: *Lavandula* and *Origanum* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".

#### **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 <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Phytophthora capsici* **Note:** Only applies to the following genera: *Abelmoschus*, *Hibiscus*, *Lavandula* and *Pistacia*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*".

#### OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora capsici*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora capsici*".
- c. Conditions for Phytophthora palmivora

**Note:** Only applies to the following genera: *Abelmoschus*, *Catharanthus*, *Coronilla*, *Dodonaea*, *Euphorbia*, *Grevillea*, *Hibiscus*, *Lavandula* and *Pistacia* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

#### OR

- iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".
- d. Conditions for *Phytophthora tentaculata* **Note:** Only applies to the following genera: *Lavandula* and *Origanum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora tentaculata*".

#### OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora tentaculata*".

#### **C. For Tissue Cultures**

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

 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 <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries <u>not</u> 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, United States of America.

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

- a. Conditions for Uredinales
   <u>Additional declaration</u>: "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. 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 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-approved facilities, or into Level 3B post entry quarantine from non-approved facilities.

#### 2. Pests of Vitis

Refer to the pest list.

#### **3.** Entry conditions for:

### **3.1** *Vitis* cuttings and tissue cultures from offshore MPI-approved facilities in any country

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Vitis*, the approved 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-approved facility].
   AND
- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved 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-approved 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 years 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 approved 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) approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants. "

**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:

- 1. 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/tests are required.

#### 3.2 Vitis cuttings and tissue culture from non-approved 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) <u>Phytosanitary requirements</u>

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 years 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 approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**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/tests are required.

#### **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	ana a flag hastla
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.	- red-shouldered leaf beetle
Monolepta australis Coccinellidae	red-shouldered lear beetle
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	C
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	false shireh has
Nysius raphanus Nysius viritor	false chinch bug
Nysius vinitor	Rutherglen bug
Oxycarenus arctatus Miridae	coon bug
Creontiades dilutus	green mirid
Pentatomidae	green mind
Euschistus conspersus	stink bug
Oechalia schellenbergi [Animals Biosecurity]	Schellenberg's soldier bug
Pyrrhocoridae	Scheneneerg s solarer eug
Dindymus versicolor	harlequin bug
Homoptera	hand and and
Aleyrodidae	
Aleurocanthus woglumi	citrus blackfly
Tetraleurodes vittatus	-
Trialeurodes vittata	grape whitefly
Aphididae	
Aphis illinoisensis	grapevine aphid
Aphis medicaginis	
Aphis medicaginis Asterolecaniidae	
	oleander pit scale
Asterolecaniidae	oleander pit scale
Asterolecaniidae Asterolecanium pustulans	-
Asterolecaniidae Asterolecanium pustulans Cerococcidae	oleander pit scale pit scale
Asterolecaniidae Asterolecanium pustulans Cerococcidae Asterococcus muratae	-

*Carneocephala fulgida* [vector] Dikrella cockerellii Draeculacephala minerva Draeculacephala minerva [vector] Empoasca sp. Erythroneura comes Erythroneura elegantula Erythroneura variabilis Erythroneura ziczac Graphocephala atropunctata Graphocephala atropunctata [vector] Hordnia circellata Scaphoideus titanus [vector] Cicadidae Platypedia minor Tettigades chilensis Coccidae Ceroplastes rusci Eulecanium cerasorum Eulecanium pruinosum Heliococcus bohemicus Parthenolecanium persicae Pulvinaria betulae Pulvinaria innumerabilis Pulvinaria vitis Diaspididae Aonidiella inornata Chrysomphalus aonidum Diaspidiotus uvae Oceanspidiotus spinosus Parlatoria cinerea Parlatoria oleae Pinnaspis strachani Pseudaonidia trilobitiformis Pseudaulacaspis pentagona Quadraspidiotus juglansregiae Selenaspidus articulatus Margarodidae Eurhizococcus brasiliensis Icerya seychellarum Margarodes capensis Margarodes greeni Margarodes meridionalis Margarodes prieskaensis Margarodes trimeni Margarodes vitis Margarodes vredendalensis Membracidae Ceresa bubalus Spissistilus bisonia Spissistilus festinus **Phylloxeridae** Viteus vitifoliae [strain] Pseudococcidae Maconellicoccus hirsutus Planococcus ficus Pseudococcus capensis Pseudococcus maritimus Rhizoecus kondonis **Hymenoptera** Aphelinidae Coccophagus caridei [Animals Biosecurity]

red-headed sharpshooter blackberry leafhopper green sharpshooter green sharpshooter green leafhopper eastern grape leafhopper western grape leafhopper variegated grape leafhopper leafhopper blue-green sharpshooter raspberry leafhopper fig wax scale calico scale frosted scale scale European peach scale scale cottony maple scale woolly vine scale inornate scale Florida red scale grape scale armoured scale chaff scale olive scale hibiscus snow scale trilobite scale white peach scale walnut scale West Indian red scale margarodid Seychelles scale Seychelles fluted scale soft scale margarodid margarodid margarodid tree hopper three-cornered alfalfa hopper grape phylloxera pink hibiscus mealybug fig mealybug grape mealybug Kondo mealybug

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]	-
soptera Kalotermitidae	
Cryptotermes brevis	West Indian drywood termite
Kalotermes flavicollis	termite
Kalotermes juviconis Kalotermes minor	-
Neotermes chilensis	termite
Rhinotermitidae	termite
Coptotermes acinaciformis [official control]	Australian subterranean termite
Reticulitermes hesperus	-
Termopsidae	
Porotermes quadricollis	-
epidoptera	
Agaristidae	
Agarista agricola	painted vine moth
Heraclia superba	grapevine zebra moth
Arctiidae	
	· · 1/····· 1/····· 1/····· 1/11/····
Estigmene acrea	saltmarsh caterpillar
Estigmene acrea Hyphantria cunea	fall webworm
	-
Hyphantria cunea	-
Hyphantria cunea Laora variabilis	fall webworm

Coryphodema tristis Zeuzera coffeae Heliozelidae Antispila rivillei Noctuidae Achaea spp. Agrotis munda Alabama argillacea Anomis mesogona Anomis spp. Calvptra spp. Copitarsia consueta *Eudocima* spp. Euxoa messoria Euxoa ochrogaster Helicoverpa punctigera *Mythimna* sp. Noctua fimbriata Noctua pronuba Oraesia spp. Orthodes rufula Peridroma margaritosa Peridroma saucia Protorthodes rufula Serrodes spp. Sphingomorpha spp. Spodoptera littoralis Xestia c-nigrum Oecophoridae Echiomima sp. Maroga melanostigma **Psychidae** Gymnelema plebigena **Pterophoridae** Geina periscelidactylus **Pyralidae** Desmia funeralis Euzophera bigella Ostrinia nubilalis Saturniidae Hemileuca eglanterina Hyalophora cecropia Sesiidae Vitacea polistiformis Sphingidae Eumorpha achemon Hippotion celerio Hyles euphorbiae Hyles lineata Theretra capensis Theretra oldenlandiae Tortricidae Archips argyrospilus Argyrotaenia citrana Argyrotaenia ljungiana Argyrotaenia velutinana Cryptophlebia leucotreta Endopiza viteana Eulia stalactitis Eupoecilia ambiguella Lobesia botrana Paralobesia viteana

quince trunk borer red coffee borer fruit-piercing moths brown cutworm cotton leafworm hibiscus looper fruit-piercing moths noctuid moth fruit-piercing moths darksided cutworm redbacked cutworm oriental tobacco budworm broad-bordered yellow underwing large yellow underwing fruit-piercing moths cutworm variegated cutworm fruit-piercing moth cotton leafworm spotted cutworm fruit tree borer bagworm grape leaf-folder quince moth European corn borer brown day-moth cecropia moth grape root borer achemon sphinx grapevine hawk moth spurge hawk moth whitelined sphinx grapevine hawk moth vine hawk moth fruit tree leafroller orange tortrix grey red-barred tortrix red-banded leafroller false codling moth

vine moth grape berry moth 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 cancentata Schistocerca shoshone	-
	-
Schistocerca vaga	-
Gryllidae	cricket
Acheta fulvipennis Mianoemllus pallines	cricket
Microgryllus pallipes	chcket
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	<b>T J C C C C C C C C C C</b>
Amblyseius victoriensis [Animals Biosecurity]	-
Metaseiulus occidentalis [Animals Biosecurity]	-
Neoseiulus chilenensis [Animals Biosecurity]	predator mite
Typhlodromus doreenae [Animals Biosecurity]	-
Tenuipalpidae	
harbrane	

Brevipalpus chilensis	false spider mite
Brevipalpus lewisi	bunch mite
Brevipalpus lilium	false spider mite
Brevipalpus obovatus	privet mite
Tenuipalpus granati	false spider mite
Tetranychidae	1
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
Terraryenus paegieus	r denne spider mite
Mollusc	
Gastropoda	
Stylommatophora	
Helicidae	
Cernuella virgata	small banded snails
Cochlicella barbara	small pointed garden snail
Theba pisana	white Italian snail
incou pisana	
Fungus	
Ascomycota	
Caliciales	
Unknown Calicialos	
Unknown Caliciales Roesleria pallida	grape root rot
Roesleria pallida	grape root rot
Roesleria pallida Diaporthales	grape root rot
Roesleria pallida Diaporthales Valsaceae	
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis)	grape root rot phomopsis canker
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales	
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae	phomopsis canker
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta	
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta ampelicida)	phomopsis canker
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta ampelicida) Guignardia bidwellii f. sp. euvitis	phomopsis canker
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta ampelicida) Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii	phomopsis canker black rot
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta ampelicida) Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora	phomopsis canker
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta ampelicida) Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus)	phomopsis canker black rot
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta ampelicida) Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus) Schizothyriaceae	phomopsis canker black rot - angular leaf spot
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta ampelicida) Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus) Schizothyriaceae Schizothyriaum pomi (anamorph Zygophiala jamaicensis)	phomopsis canker black rot - angular leaf spot
Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus)Schizothyriaceae Schizothyrium pomi (anamorph Zygophiala jamaicensis)Hypocreales	phomopsis canker black rot - angular leaf spot
Roesleria pallida Diaporthales Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) Dothideales Mycosphaerellaceae Guignardia bidwellii (anamorph Phyllosticta ampelicida) Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus) Schizothyriaceae Schizothyriaceae Schizothyrium pomi (anamorph Zygophiala jamaicensis) Hypocreales Hypocreales	phomopsis canker black rot - angular leaf spot fly speck
Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus)Schizothyriaceae Schizothyrium pomi (anamorph Zygophiala jamaicensis)Hypocreales Hypocreaceae Cylindrocarpon destructans var. crassum	phomopsis canker black rot - angular leaf spot
Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. muscadiniiMycosphaerella angulata (anamorph Cercospora brachypus)Schizothyriaceae Schizothyrium pomi (anamorph Zygophiala jamaicensis)Hypocreales Leotiales	phomopsis canker black rot - angular leaf spot fly speck
Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus)Schizothyriaceae Schizothyrium pomi (anamorph Zygophiala jamaicensis)Hypocreales Hypocreaceae Cylindrocarpon destructans var. crassumLeotiales Dermateaceae	phomopsis canker black rot - angular leaf spot fly speck root rot
Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus)Schizothyriaceae Schizothyrium pomi (anamorph Zygophiala jamaicensis)HypocrealesHypocrealesLeotialesDermateaceae Pseudopezicula tetraspora	phomopsis canker black rot - - angular leaf spot fly speck root rot angular leaf scorch
Roesleria pallida         Diaporthales         Valsaceae         Diaporthe rudis (anamorph Phomopsis rudis)         Dothideales         Mycosphaerellaceae         Guignardia bidwellii (anamorph Phyllosticta         ampelicida)         Guignardia bidwellii f. sp. euvitis         Guignardia bidwellii f. sp. euvitis         Guignardia bidwellii f. sp. muscadinii         Mycosphaerella angulata (anamorph Cercospora brachypus)         Schizothyriaceae         Schizothyriaceae         Schizothyriaceae         Cylindrocarpon destructans var. crassum         Leotiales         Dermateaceae         Pseudopezicula tetraspora Pseudopezicula tracheiphila	phomopsis canker black rot - angular leaf spot fly speck root rot
Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus)Schizothyriaceae Schizothyriam pomi (anamorph Zygophiala jamaicensis)Hypocreales Hypocreales Dermateaceae Pseudopezicula tetraspora Pseudopezicula tracheiphila	phomopsis canker black rot - angular leaf spot fly speck root rot angular leaf scorch rotbrenner
Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus)Schizothyriaceae Schizothyriam pomi (anamorph Zygophiala jamaicensis)HypocrealesHypocrealesHypocrealesPseudopezicula tetraspora Pseudopezicula tracheiphilaSclerotiniaceae Grovesinia pyramidalis (anamorph Cristulariella	phomopsis canker black rot - - angular leaf spot fly speck root rot angular leaf scorch
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Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. muscadinii Mycosphaerella angulata (anamorph Cercospora brachypus)SchizothyriaceaeSchizothyriaceaeSchizothyriam pomi (anamorph Zygophiala jamaicensis)HypocrealesHypocrealesDermateaceaePseudopezicula tetraspora Pseudopezicula tracheiphilaSclerotiniaceaeGrovesinia pyramidalis (anamorph Cristulariella moricola)Rhytismatales Rhytismataceae	phomopsis canker black rot - - angular leaf spot fly speck root rot angular leaf scorch rotbrenner target spot
Roesleria pallidaDiaporthalesValsaceaeDiaporthe rudis (anamorph Phomopsis rudis)DothidealesMycosphaerellaceaeGuignardia bidwellii (anamorph Phyllosticta ampelicida)Guignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. euvitisGuignardia bidwellii f. sp. muscadiniiMycosphaerella angulata (anamorph Cercospora brachypus)Schizothyriaceae Schizothyrium pomi (anamorph Zygophiala jamaicensis)HypocrealesHypocrealesHypocreaceae Cylindrocarpon destructans var. crassumLeotialesDermateaceae Pseudopezicula tetraspora Pseudopezicula tracheiphilaSclerotiniaceae Grovesinia pyramidalis (anamorph Cristulariella moricola)Rhytismatales	phomopsis canker black rot - angular leaf spot fly speck root rot angular leaf scorch rotbrenner

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	armillaria root rot
subcorticalis)	
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	
<i>Stereum</i> 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	1
Ascochyta ampelina	leaf spot
Coniella diplodiella	white rot white rot
Coniella petrakii Plasmonia longia granhugata	
Phomopsis longiparaphysata	phomopsis rot
Pyrenochaeta vitis	leaf spot septoria leaf spot
Septoria ampelina University Coolomyootta	septoria lear spot
Unknown Coelomycetes Unknown Coelomycetes	
Nattrassia toruloidea	laaf spot
Pestalotia menezesiana	leaf spot fruit rot
Pestalotia pezizoides	fruit and leaf spot
Pestalotiopsis mangiferae	grey leaf spot of mango
Pestalotiopsis mangijerae Pestalotiopsis uvicola	fruit rot
Mitosporic Fungi (Hyphomycetes)	11411 101
Hyphomycetales	
Dematiaceae	
Alternaria vitis	leaf disease
Phaeoramularia dissiliens	cercospora leaf spot
Moniliaceae	conception real spot

Canhalognarium an	
<i>Cephalosporium</i> sp. <i>Penicillium aurantiogriseum</i>	 penicillium rot
Verticillium heterocladum	peniennum rot
Unknown Hyphomycetes	-
Unknown Hyphomycetes	
Briosia ampelophaga	leaf blotch
Candida krusei	yeasty rot
Candida steatolytica [Animals Biosecurity]	-
<i>Oidium</i> 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	-
<i>Cherry leaf roll virus</i> [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	_
Grupevine years specine virou 2	
Phytoplasma	
Australian grapevine yellows phytoplasma	-
Grapevine bois noir phytoplasma	-
Grapevine flavescence doree phytoplasma	-
Grapevine yellows	-
Palatine grapevine yellows	-
Tomato big bud phytoplasma	-

#### 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)
Mites	Visual inspection AND approved miticide treatments (Refer to section
	2.2.1.65 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
Bacteria	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.	Growing season inspection in PEQ for disease symptom expression AND
viticola	Hot water treatment (Refer to "Approved Treatments for Vitis")
Xylophilus ampelinus	Growing season inspection in PEQ for disease symptom expression AND
	Hot water treatment (Refer to "Approved Treatments for <i>Vitis</i> ")
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")
Viruses	water treatment (Refer to Approved Treatments for vius )
Artichoke Italian latent virus	Growing season inspection in PEQ for disease symptom expression
Cherry leaf roll virus [strains	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
not in New Zealand]	LEISA OF FER AND INFORCEOUS INDICATORS (Ca, Cq, Cs and W)
Grapevine Ajinashika disease	Growing season inspection in PEQ for disease symptom expression
virus	
Grapevine Algerian latent virus	Growing season inspection in PEQ for disease symptom expression
Grapevine Anatolian ringspot	Growing season inspection in PEQ for disease symptom expression
virus	
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	Herbaceous indicators (Ca and Cq)
virus	
Grapevine chrome mosaic virus	Herbaceous indicators (Ca, Cq, Cs and Nt)
Grapevine deformation virus	Herbaceous indicators (Ca and Cq)
<i>Grapevine fanleaf virus</i> [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators (Ca, Cq, and Cs)
Grapevine labile rod-shaped	Growing season inspection in PEQ for disease symptom expression
virus Grapevine leafroll-associated	PCR
virus [type 7]	
Grapevine line pattern virus	Growing season inspection in PEQ for disease symptom expression
Grapevine pinot gris virus	PCR
Grapevine red blotch-	PCR
associated virus	Growing season inspection in PEQ for disease symptom expression
Grapevine stunt virus Grapevine Tunisian ringspot	Growing season inspection in PEQ for disease symptom expression Growing season inspection in PEQ for disease symptom expression
virus	Growing season inspection in r EQ 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	ELISA or PCR
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	PCR AND herbaceous indicators (Ca, Cq and Cs)
[strains not in New Zealand]	

Tomato ringspot virus	ELISA or PCR AND herbaceous indicators (Ca and Cq)
Viroids	Growing season inspection in PEQ for disease symptom expression
Phytoplasmas	<ul> <li>Plants derived from cuttings: Nested PCR or real-time PCR using universal phytoplasma primers AND Hot water treatment (Refer to "Approved Treatments for <i>Vitis</i>")</li> <li>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)</li> </ul>
Diseases of unknown aetiolo	ogy
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-approved facilities or 3.2 (iii) for non-approved 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).
- For the treatment, the dormant material must be dipped into the hot water at 50°C for 45 minutes or at 45°C for 3 hours (FAO/IBPGR Technical Guidelines for Safe Movement of Grapevine Germplasm, 1990, Martelli G.P and Walter B. Virus Certification of

Grapevines. In - Plant Virus Disease Control, edited by A. Hadidi, RK Khetarpal and H Koganezawa. APS Press 1998). The water bath must have a moving system to homogenize the temperature and a precise control system to monitor the temperature at an accuracy of 0.1°C.

3. After the treatment the cuttings must stay for one day (24 hours) at room temperature. After this period, they are transferred to a cool room.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *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.

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 Arbuscular mychorrhizae All regulated species Ectomycorrhizae All regulated species

black rot

**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

Quarantine Pests: Phytophthora palmivora

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

a. Conditions for Phytophthora palmivora

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

OR

ii) "The [insert species name] plants in this consignment were produced in a 'pest free area' for *Phytophthora palmivora*".

OR

iii)"The [insert species name] plants in this consignment were produced in a 'pest free place of production' for *Phytophthora palmivora*".

#### **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 *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 for Primary Industries (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/tests 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) <u>Special tissue culture media requirements</u>

The tissue culture media may contain charcoal.

### (iii) <u>Phytosanitary requirements</u>

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 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/tests are required.

# Pest List for Zantedeschia

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# **REGULATED PESTS (actionable)**

Nematode Secernentea Tylenchida Meloidogynidae Meloidogyne arenaria	peanut root knot nematode
Fungus	
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
Armillaria mellea (anamorph Rhizomorpha	armillaria root rot
subcorticalis)	
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

#### a. 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 'Pesticide treatments for dormant bulbs' of the basic conditions within 7 days prior to freezing, cold-storage or shipment."
- b. Conditions for *Helicobasidium mompa*

"The dormant bulbs in this consignment have been:

- sourced from a 'pest free area' or 'pest free place of production' [choose ONE], free from *Helicobasidium mompa*."
   OR
- treated for regulated nematodes and fungi as described in section 2.2.1.7
   'Pesticide treatments for dormant bulbs' 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** 

a. Conditions for virus diseases

<u>Additional declaration</u>: "The cultures have been derived from parent stock tested and found free of virus diseases."