

# 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
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#### **ENDORSEMENT**

This consolidated import health standard comes into force on 27 January 2022.

This import health standard amends the Import Health Standard: *Importation of Nursery Stock* (155.02.06), which came into force on 21 June 2021, and consolidates all amendments made up to commencement of this notice.

This import health standard is issued under section 24A of the Biosecurity Act 1993 and incorporates amendments made in accordance with section 24B(1)(a) of that Act.

Dated at Wellington, [document date]

Lisa Winthrop
Manager, Plant Health Group
Ministry for Primary Industries
(acting under delegated authority of the Director-General)

#### **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 has previously been 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 Lilium 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, 6	October 2005
	Hydrangea, Iris, and Lilium schedules	
5	Acacia, Acer, Begonia, Canna, Cotoneaster and Hydrangea schedules, section 2.2.1.7	8 February 2006
6	Acer, Aesculus, Arbutus, Acacia, Calladium, Camellia, 22 May	2006
	Castanea, Gaultheria, Fagus, Kalmia, Photinia, Prunus and	
	Vaccinum schedules, section 2.2.1.10, section 2.2.1.11	
7	Actinidia, Hippeastrum and Prunus schedules 9 August 2006	
8		st 2008 <i>tuberosum</i> , and
	Zantedeschia schedules	
9	Corylus and Wollemia nobilis schedules. 10 November 2008	/ A mail 2000 ashadulad
10		/ April 2009 schedules
11		er 2009
12	Section 2.2.1.11 20 October 2009	
13	Tulipa schedule 18 January 2010	L-1 20101 1-1
14		6 July 2010 schedules.
15	Allium schedule 13 September 2010	7.1. 2011
16	Berberis, Carpinus, Cotoneaster, Eucalyptus, Nandina, Olea, Populus, Pseudotsuga, Ulmus schedules, section 2.2.1.10 and section 2.2.1.11	7 June 2011
17	Phalaenopsis schedule 8 August 2011	
18	Removal of the schedules for <i>Acca sellowiana</i> and <i>Agonis</i> , with incorporation under the <i>Metrosideros</i> schedule. Amendment to the <i>Eugenia</i> schedules.	1 -
19	Dracaena schedule 12 September 2011	
20	Malus schedule 20 June 2012	
21	Artocarpus schedule 29 June 2012	
22	Cycas, Dracaena, Fuchsia schedules, section 2.2.1.10, 2.2.1.11, 2.2.3 and 2.3.3	16 August 2012
23	Solanum tuberosum schedule 8 April 2013	
24	Eucalyptus, Eugenia, Metrosideros and Vitis schedules 22 May	2013
25	Actinidia schedule 6 September 2013	

26	Section 2.2.2.2	27 January 2014	
2 7	Vitis schedule	11 March 2014	
28	Rubus schedule	21 March 2014	
29	Section 2.3.2.1, se	ction 2.2.1.11, schedules for Allium, Begonia	a, 11 June 2014
	Gladiolus, Hippeastri iganteus, Narcissus,	s, Dahlia, Fortunella, Fragaria, um, Lilium, Malus, Miscanthus x Olea, Persea, Poncirus, Prunus, Rubus, Tulipa, Vaccinium, Vaccinium is	
30	Schedules for Chr	ysanthemum, Diascia, Dahlia and Solanum	18 August 2014
31	Schedules for <i>Citr</i> 2014	us, Fortunella, Fragaria, Malus and Poncir	s 27 November
32	Schedules for Hipp	peastrum and Vitis 21 January 2015	
33	Ceratocystis fimbr Acacia, Acrocomic Fagus, Fagus sylv	riata, with renumbering of subsequent section, Carica, Carya, Carya ovata, Citrus, Delpatica, Ficus, Fragaria, Juglans, Malus, Martanus, Populus, Prunus, Quercus, Rubus, Tu	hinium, Eucalpytus, gifera,
34	Schedules for Fraguetuberosum, Vaccin	garia, Malus, Olea, Prunus, Rubus, Solanun aium and Vitis	11 March 2016
35	Section 2.2.1.12, a	and schedule for Acacia 06 May 2016	
D F M	renumbering of su Araucaria, Arbutu Camellia, Camellia su Delphinium, Diospyro Cicus, Fortunella, He Metrosideros, Nandin	new section for <i>Phellinus noxius</i> , with 21 Nobsequent sections). Schedules for <i>Acacia</i> , <i>Cedrus</i> , <i>Citrus</i> , <i>Crataegus</i> , <i>Cycas</i> , <i>Os</i> , <i>Eriobotrya</i> , <i>Eucalyptus</i> , <i>Eugenia</i> , <i>Bersea</i> , <i>Hydrangea</i> , <i>Litchi</i> , <i>Mangifera</i> , <i>Dersea</i> , <i>Planera</i> , <i>Poncirus</i> , <i>Populus</i> , <i>On</i> , <i>Rosa</i> , <i>Salix</i> , <i>Ulmus</i> , and <i>Vitis</i>	
B C E F I I I P C P R	cacia, Acer, Acrocolidens, Canna, Caryo Totoneaster, Delphin Tupatorium, Fagus, Fortunella, Fragaria, Domoea batatas, Jug Plea, Persea, Phoeni. Trunus, Pseudotsuga, Tubus, Salix, Solanum	2.2.1.12, 2.2.1.12, 2.3.2. Schedules for 21 Imia, Aesculus, Arbutus, Asparagus, a, Carya ovata, Castanea, Citrus, ium, Diospyros, Eucalyptus, Eugenia, Fagus sylvatica, Ficus, Fuchsia, Helianthus, Hebe, Humulus, Hydrangea, lans, Juniperus, Metrosideros, Nandina, x, Photinia, Platanus, Poncirus, Populus, Pyrus, Quercus, Ranunculus, Rosa, tuberosum, Solidago, Ulmus, Vaccinium,	

for *Xylella fastidiosa*), 27 February 2017 2.2.2.6 (new section for post entry quarantine), and 2.3.

	Schedules for Acacia, Acer, Acrocomia, Aesculus, Arbutus, Asparagus, Bidens, Canna, Carya, Carya ovata, Castanea, Cotoneaster, Delphinium, Diospyros, Eucalyptus, Eugenia, Eupatorium, Fagus, Fagus sylvatica, Ficus, Fuchsia, Hebe, Humulus, Hydrangea, Ipomoea batatas, Juglans, Malus, Metrosideros, Nandina, Phoenix, Photinia, Platanus, Populus, Prunus, Pseudotsuga, Quercus, Ranunculus, Rosa, Salix, Solanum tuberosum, Solidago, Ulmus, Vaccinium macrocarpon, and Verbena
40	Updated sections 1.3 and 1.4, and relevant schedules to align with commencement of Facility Standard: Post Entry Qurantine for Plants (MPI.STD.PEQ).
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 <i>Vaccinium</i> schedule with a change to post 2017 entry quarantine requirements for tissue cultures.
44	Amendment to the <i>Delphinium</i> schedule with addition of 04 April 2018 <i>Euryops</i> for conditions for <i>Xylella fastidiosa</i> .
45	Addition of conditions for <i>Phytophthora capsici</i> , <i>P. palmivora</i> and <i>P. tentaculata</i> in the following schedules: <i>Abies, Acacia, Acer, Acrocomia, Aesculus, Allium, Araucaria, Arbutus, 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</i> and creation of three new schedules (i.e. <i>Anthurium, Cichorium</i> and <i>Epipremnum</i>
46	Amendment to the <i>Solanum tuberosum</i> schedule with addition  'Candidatus Liberibacter solanacearum' haplotype B, Columbia basin purple top phytoplasma, <i>Pectobacterium polaris</i> and <i>Potato Virus</i> H.
47	Amendment to the <i>Anthurium</i> and <i>Rosa</i> schedules with additions of measures for <i>Ralstonia pseudosolanacearum</i>
48	Amendment to the <i>Araucaria</i> schedule with addition of <i>Xylella</i> 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 Grapevine Pinot gris virus
_50_	Amendment to the <i>Acacia</i> and <i>Epipremnum</i> 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 Ralstonia pseudosolanacearum
52	Amendment to the <i>Vaccinium</i> schedule with addition of 30 August 2019
	measures for Ralstonia pseudosolanacearum

53	Amendment to the <i>Actinidia</i> schedule and Section 2.2.1.12 29 November 2019
33	"Measures for Xylella fastidiosa"
54	Amendment to the <i>Prunus</i> schedule 23 January 2020
56_	Amendment to the <i>Ficus</i> schedule with addition of measures for 07 February
	2020 Ralstonia pseudosolanacearum
57	Amendment to the 'Basic entry conditions' 2.2.1.6 (b) to 20 May 2020 manage
37	regulated plant mites. Amendment of the Calanthe, Dahlia, Tricyrtis, Verbena,
	Hydrangea, Gentiana schedules with removal of special measures for Tetranychus
	kanzawai.
58	Amendment to the <i>Petunia</i> schedule: addition of option for 20 May 2020 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.
59	Amendment to the <i>Arbutus</i> and <i>Metrosideros</i> schedules editing 2 June 2020 the
	Xylella fastidiosa note. Amendment to the Chrysanthemum, Chrysanthemum
	morifolium and Cichorium schedules to add
	Xylella fastidiosa measures. Minor amendment to Arbutus,
	Chrysanthemum, Cichorium and Metrosideros schedules to fix
	grammatical errors.
60	Amendment to the Acacia, Aesculus, Petunia, Solanum and 22 July 2020 Verbena
	schedules with addition of measures for <i>Columnea latent viroid</i> , <i>Tomato apical stunt viroid</i> and <i>Tomato chlorotic dwarf viroid</i> . Harmonization of measures for <i>Potato</i>
	spindle tuber viroid on the Chrysanthemum, Dahlia and Diascia schedules.
	Amendment to the <i>Acacia</i> , <i>Anthurium</i> , <i>Epipremnum</i> , <i>Ficus</i> and <i>Røsa</i> schedules to add
	acceptable PFPP declaration for <i>Ralstonia pseudosolanacearum</i> from Costa Rica.
	Addition of <i>Hoya</i> schedule
61	Minor amendments to the whole IHS to address inconsistencies,  03 December
	2020 typos and other administrative changes.
62	Removal of woody indexing as a requirement in the <i>Malus</i> 2 March 2021
	schedule of special entry conditions; and a subsequent
	adjustment to the post entry quarantine period and inspection,
	testing and treatment requirements table.
63	Amendment to Chrysanthemum morifolium schedule with 21 June 2021 addition
64	of measures for Potato spindle tuber viroid (PSTVd).
64	Correction and addition of formatting, grammar, and guidance 12 August 2021
	in Sections 3 (Vitis, Ficus and Solanum tuberosum), 2.2.1.8, 3.3, 1.3, 2.2.1.12,
65	2.2.2.5, 2.2.1.4 and the Amendment Record (No. 45) Amendment to the <i>Anthurium</i> , <i>Delphinium</i> and <i>Metrosideros</i> ,  6 September
	2021 schedules to add measures for <i>Xylella fastidiosa</i> on the <i>Callistemon, Clematis</i> ,
	Ocimum and Psidium genera.
66	Amendment to <i>Citrus</i> , <i>Fortunella</i> and <i>Poncirus</i> schedules 8 December 2021
67	Amendment to section 2.2.1.11 to remove <i>Malus</i> as a host of 20 December
07	2021 Phytophthora ramorum
	2021 Ingrepuliora ramoram

68	Amendment to the Musa schedule of special entry conditions to	27 January 2022
	make a permit a requirement for tissue culture and adding	
	importer guidance	
XX	Amendment to the Calanthe and Phaleanopsis schedules to add	[document date]
	measures for Orchid fleck dichorhavirus (OFV). Creation of one	
	new schedule, <i>Dendrobium</i> , with measures for OFV.	



#### 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 5514

E-mail: <u>PlantImports@mpi.govt.nz</u>
Website: http://www.mpi.govt.nz

#### 1.2 SCOPE

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

#### 1.3 REFERENCES

#### New Zealand legislation

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

#### Standards issued under the Biosecurity Act 1993 The

following standards can be accessed on the website:

 $\underline{https://www.biosecurity.govt.nz/importing/plants/nursery-stock/requirement-documents-forimporting-nursery-stock/}$ 

- 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/import/border-clearance/transitional-and-containment-facilities-forborder-clearance/find-treatment-options-and-provider/

• 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 *invitro* 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: MPI Plants Biosecurity Index

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

**Plants** *in vitro*: A commodity class for plants growing in an aseptic medium in a closed container [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: http://www.epa.govt.nz

If a plant species is not included in the Plants Biosecurity Index, but is considered by an importer to be established in New Zealand, the applicant should provide information, including supporting evidence capable of being verified, to EPA.

#### **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 5514

E-mail: PlantImports@mpi.govt.nz Website:

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 (<a href="http://www.doc.govt.nz">http://www.doc.govt.nz</a>).

#### 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:

https://www.biosecurity.govt.nz/dmsdocument/36648-application-for-permit-to-import-nursery-stock-orseed-for-sowing

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.

#### Guidance:

- Coco peat, peat or Sphagnum moss used as packaging material for nursery stock must comply with the requirements of the <u>Fertilisers and Growing Media of Plant Origin import health standard</u> in order to be compliant with the import health standard 155.06.02: Importation of Nursery Stock.
- Please note, "packaging material" should only be used for supporting, protecting or carrying a commodity as defined in the International Standards for Phytosanitary Measures (ISPM) 5: Glossary

#### 2.2.1.5 Phytosanitary Certificate

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

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

#### 2.2.1.6 Pesticide treatments for whole plants and cuttings

(a) For whole plants the phytosanitary certificate must have the following additional declaration, unless stated otherwise in the "schedule of special conditions":

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

#### OR

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

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

#### **Insects**

One of the following three treatments is required:

(1) Methyl bromide (dormant material only): fumigation for 2 hours at atmospheric pressure at one of the following combinations of rate (g/m³) and temperature (°C): **Rate** (g/m³) **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>MPIApproved 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  $10\,^{\circ}$ 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		
		Minimum	Minimum
Minimum initial concentration	concentration-time te product (CT)/	emperature concent	ration
(g/m 3)* fumigation (g/m3)**	achieved dose (g·h/m	13) over duration of tre	eatment (°C) during
2 hi 2.5 h <sup>ii</sup>	3 h <sup>iii</sup>		2 h <sup>i</sup> 2.5 h <sup>ii</sup> 3 h <sup>iii</sup>

68	56	48	_	120	10	51	41	34
57				100	16			28
48	48	40		85	21	43	35	24
	40	34	_			36	29	
40	32	2	28	70	28	30	23	20

<sup>\*</sup>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.

#### **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/m³)) 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/m³) and time (h) over the duration of the treatment. This is in accordance with ISPM 43: Requirements for the use of fumigation 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 (twoacaricides 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**

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

Active ingredient	Chemical group	Rate (g/L water)*	Formulation type**	Retreatment period ***
Spiromesifen	Tetronic and Tetramic acid derivatives; group 23	0.152	SC	7 -10 days
Milbemectin	Avermectins, Milbemycins; group 6	0.012	SC	

<sup>\*\*</sup>Minimum concentration during fumigation (g/m³) 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 3 continuous hours

Fenpyroximate	METI acaricides and insecticides;	0.025	SC	
	group 21A			
Bifenazate+	Bifenazate; group 20D	0.135	SC	7 -10 days
Abamectin	Avermectins, Milbemycins; group 6	0.007		

<sup>\*</sup>Concentration of active ingredient (not amount of concentrate solution)

#### **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 (	Non-dormant material only)		
Etoxazole	Etoxazole; group 10B	0.038	SC
Group 'a'			
Abamectin	Avermectins, Milbemycins; group 6	0.012	EC
Chlorfenapyr	Pyrroles; group 13	0.087	SC
OPTION 2B			
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

<sup>\*</sup>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  $(^{\circ}C)$ :

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

<sup>\*\*</sup>SC-Suspension concentrate

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

28	28 - 32

#### OR

(2) Actellic room fumigation: 10 cc Actellic/10m<sup>3</sup> 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  $(g/m^3)$  Temperature (°C)

48	10 – 15
40	16 – 20
32	21 – 27
28	28 – 32

#### OR

(2) Actellic room fumigation: 10 cc Actellic/10m<sup>3</sup> of room capacity for 12 hours at 20°C or higher. The first treatment should take place within 14 days after harvesting. Repeat the treatment two more times within an interval of 4 weeks.

#### OR

(3) Hot water treatment: immersion in hot water at a constant temperature of 24°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 only Organophosphor surfactant	Acephate (0.75 g per litre of dip/spray) ous Chlorpyrifos (2.4 g per litre of d	2-5 mins ip/ spray) 2	Non-dormant material 2-5 mins Non-ionic
Organophosphorous	Dimethoate	2-5 mins	required for dipping Non-dormant material only
Organophosphorous	Pirimiphos-methyl (0.475 g per litre of	2-5 mins	Non-ionic surfactant
	dip/spray)		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  $(^{\circ}C)$ : Rate  $(g/m^3)$  Temperature  $(^{\circ}C)$ 

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	5 mins	
of dip)		
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	15-30 mins	Dip at 27-29.5°C
	dip)		
Dimethyldithiocarbamate	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 Eucalyptus Protea
- Alocasia
   Fagus
   Punica

- Ananas Ficus carica Quercus
- Annona Inga Schizolobium
- Betula Juglans Schotia
- Carya Mangifera Spathodea
- Cassia Metrosideros Styrax
- Celtis Metroxylon Syngonium
- Colocasia Ostrya Tilia
- Corymbia Passiflora Ulmus
- Eriobotrya Pimenta Xanthosoma
- Erythrina Populus

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

The following Additional Declaration shall be endorsed on the phytosanitary certificate:

"The plants have been sourced from a country free from *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand)"

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

# ii) For 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.

#### iii) For nursery stock sourced from MPI approved offshore facilities

Specific measures are detailed in the agreement between MPI and the approved facility, or the plants must be tested for the *C. fimbriata sensu lato* complex (strains not in New Zealand) during the post entry quarantine period, at an MPI approved diagnostic facility.

#### 2.2.1.9 Measures for *Helicobasidium mompa*

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

#### A. For nursery stock from the following countries:

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

#### For whole plants, cuttings and dormant bulbs:

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

#### B. For nursery stock from the following countries:

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

#### a) For dormant bulbs:

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

#### b) For whole plants and cuttings:

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

#### AND

(ii) the consignment must be treated for the fungus as follows, unless the nursery stock requires Level 3B PEQ as stated in the "Schedule of special 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.

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	
Dimethyldithiocarbamate	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 • Populus
- Acer • Fagus • Pseudotsuga
- Aesculus • Fagus sylvatica • Quercus
- Arbutus • Fuchsia • Rhododendron
- Berberis Gaultheria Rubus
- Carpinus Kalmia • Salix
- Castanea Lithocarpus densiflorus • Ulmus
- Olea Viburnum Corylus
- Cotoneaster • Photinia

#### 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
- Clematis
- Cornus • Picea

- **Empetrum**
- Erica
- Garrya
- Gevuina
- Grevillea
- Hedera
- Hydrangea
- *Ilex*
- Larix
- Liriodendron
- Loropetalum
- Mahonia
- Manglietia
- Nerium
- Veronica spicata
- Corylopsis
- Pistacia
- Zenobia

Distylium

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

#### 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*"

Note: The following countries are presently recognised by MPI as free of *Phytophthora ramorum*:

Australia, Israel, Japan, and South Africa.

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

The following Additional Declaration shall be endorsed on the phytosanitary certificate:

"The plants have been sourced from a NZ MPI approved 'pest free place of production' for *Phytophthora ramorum*"

Note: No countries presently have MPI approved 'pest free place of production' programmes for *Phytophthora ramorum*.

Countries wishing to export *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.

#### Guidance:

1. All consignments of *Xylella fastidiosa* host whole plants, cuttings, and dormant bulbs must meet the 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

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 'summerlike') 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: https://www.biosecurity.govt.nz/dmsdocument/15655

#### 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
- Asia: Andaman Islands, China, Islands of China, East Indies, India, Indonesia, Islands of Japan, Malay Peninsula, Malaysia, Myanmar, Nicobar Islands, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Vietnam
- Central America & Caribbean: Brazil, Costa Rica, Cuba
- <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: http://www.mpi.govt.nz/news-and-resources/resources/registers-and-lists/post-entry/

#### 2.2.2 ENTRY CONDITIONS FOR TISSUE CULTURE

#### 2.2.2.1 Labelling

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

#### 2.2.2.2 Cleanliness & Tissue Culture Media

Cultures imported in growing media must have been grown in the vessel in which they are imported. The vessel (rigid container, bag or pottle) must be pest proof and transparent. The tissue culture medium must not contain fungicides or antibiotics. Plants in tissue culture must be produced in a facility under conditions that prevent contamination with regulated pests.

#### 2.2.2.3 Phytosanitary Certificate

Cultures must be accompanied by a phytosanitary certificate, certifying that the 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 *Xylella fastidiosa* host tissue culture must meet the 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: https://www.biosecurity.govt.nz/dmsdocument/15655

#### 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 not occur.
- For tissue cultures that must be grown in a PEQ greenhouse, the quarantine period will begin when the plants are deflasked in the greenhouse. Prior to deflasking tissue cultures into the PEQ greenhouse, individual imported tissue culture plantlets may be subcultured 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: <a href="http://mpi.govt.nz/news-and-resources/resources/registers-and-lists/offshore/">http://mpi.govt.nz/news-and-resources/resources/registers-and-lists/offshore/</a>

## 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.

Abies

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

## **GENERAL CONDITIONS:**

**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 Plants

**PEQ**: Level 3B

**Minimum Period:** 6 months

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

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

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

Acacia

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

#### **GENERAL CONDITIONS:**

**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* 

i. 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 greenhouse</u>, 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 PEQ greenhouse</u>, 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 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 Xylella fastidiosa are identified in section 2.2.2.5.
Viroids		
Tomato chlorotic dwarf viroid	PCR based methods	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.

The entry conditions in 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*Additional Declaration: "*Cryphonectria parasitica* is not known to occur in \_\_\_\_\_

  [the country or state where the plants/cuttings were produced]".

#### OR

**PEQ:** Level 3B

Minimum Period: 6 months

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

# **Note:**

# **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 greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

The entry conditions in 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 Cuttings

PEQ: Level 2

**Minimum Period**: 3 months

**Height Limit**: Plants must not exceed 1.5m in height

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note**: Only applies to members of the *Metroxylon* genus
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only applies to members of the *Phoenix* genus

**Guidance for importers**: The minimum quarantine period will be <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

Note: Ad	Iditional Declaration: "Cadang cadang and lethal yellowing are not known to occur in[the country or state where the plants were grown]".
	Cissue Cultures tandard Entry Conditions for Tissue Cultures - see Section 2.2.2.
PEQ: Le	ection 2.2.2.4, an import permit is required evel 2 m Period: 3 months
Not Gui	nditions for <i>Xylella fastidiosa</i> on tissue culture (section 2.2.2.5) <b>te:</b> Only applies to members of the <i>Phoenix</i> genus <b>idance for importers</b> : The minimum quarantine period will be <u>6 months</u> for tissue cultures sourced m countries <u>not</u> recognised by MPI as free from <i>Xylella fastidiosa</i>
	nditions for Cadang cadang and lethal yellowing <a href="https://ditional Declaration">ditional Declaration</a> : "Cadang cadang and lethal yellowing are not known to occur in

\_[the country or state where the plants were grown]".

# Actinidia

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: <a href="https://www.biosecurity.govt.nz/importing/plants/nursery-stock/">https://www.biosecurity.govt.nz/importing/plants/nursery-stock/</a>

Note:

Aesculus

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

## **GENERAL CONDITIONS:**

**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".

#### ΛR

- 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 greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

# Inspection, Testing and Treatment Requirements for Pittosporum tobira

ORGANISM	MPI-ACCEPTED METHODS	Comments
Bacteria		

Xylella fastidiosa	Refer to section 2.2.1.12 "Measures for Xylella fastidiosa"	Applies to whole plants, cuttings only. Testing requirements for <i>Xylella 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  Xylella fastidiosa 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.

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

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

Dormant bulbs

Plants in tissue culture

#### 2. Pests of Allium

Refer to the pest list.

## 3. Entry conditions for:

## 3.1 Allium dormant bulbs from any country

## (i) Documentation

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

## (ii) *Phytosanitary requirements*

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The Allium dormant bulbs have been:

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

## AND

- sourced from a 'pest free area' (country freedom), free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

## **AND**

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

#### AND

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

## • Phytoplasmas:

Aster yellows phytoplasma, Garlic decline phytoplasma, and Onion yellows phytoplasma.

## Viruses:

Garlic dwarf virus, Garlic mite-borne latent virus, Garlic virus X, Onion mite-borne latent virus, Shallot yellow stripe virus, Sint-Jan's onion latent virus and Tobacco rattle virus.

#### • Bacteria:

Erwinia chrysanthemi pv. Chrysanthemi, Burkholderia cepacia, and Pseudomonas xanthochlora.

#### **AND**

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

# (iii) Additional declarations to the phytosanitary certificate

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

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

- 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)."

#### AND

- 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) <u>Post-entry quarantine</u>

#### PEO: 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 muricatusweevilBrachycerus undatusweevilCeutorhynchus jakovlevionion weevil

Nitidulidae

Carpophilus obsoletus dried fruit beetle

Diptera

Anthomyiidae

Delia antiquaonion maggotDelia florilegaonion fly

Heleomyzidae

Suillia lurida garlic fly

Suillia univittata -

Syrphidae

Eumerus amoenus onion bulb fly

Lepidoptera Cossidae

Dyspessa ulula garlic moth

**Yponomeutidae** 

Acrolepia alliella -

Acrolepia sapporensis allium leafminer Acrolepiopsis assectella leek moth

Thysanoptera Thripidae

Thrips tabaci [vector] onion thrips

Mite

Arachnida

Acarina Acaridae

Rhizoglyphus setosus

bulb mite

Eriophyidae

Aceria tulipae [vector] wheat curl mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Paralongidorus maximus

Trichodoridae

Paratrichodorus alliusstubby root nematodeParatrichodorus minor [vector]stubby root nematode

Paratrichodorus teres stubby root nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides besseyi rice white-tip

nematode

Aphelenchoides parietinus -

Belonolaimidae

Belonolaimus gracilis sting nematode

Hoplolaimidae

Helicotylenchus indicussprial nematodeHelicotylenchus microlobusspiral nematodeHelicotylenchus multicinctusspiral nematodeHoplolaimus seinhorstilance nematodeRotylenchulus reniformisreniform nematode

Meloidogynidae

Meloidogyne arenaria peanut root knot

nematode

Meloidogyne chitwoodi root knot nematode

Tylenchidae

Ditylenchus dipsaci [strains not in New Zealand] stem and bulb nematode

**Fungus** 

Ascomycota

**Dothideales** 

Mycosphaerellaceae

Mycosphaerella allii-cepae (anamorph Cladosporium leaf blotch

allii-cepae)

**Basidiomycota: Basidiomycetes** 

**Agaricales** 

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha armillaria root rot

subcorticalis)

**Basidiomycota: Teliomycetes** 

**Uredinales** 

Melampsoraceae

Melampsora allii-fragilis rust

Pucciniaceae

Puccinia asparagi asparagus rust

**Basidiomycota: Ustomycetes** 

Ustilaginales Tilletiaceae

Urocystis colchici leaf smut

Oomycota

 ${\bf Peronos porales}$ 

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* 

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

**PEO:** 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."

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

**OPTION 2: PEQ:** Level 1

**Minimum Period:** 3 months

#### C. For Tissue Cultures

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

Andromeda

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

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

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

#### **B.** For Dormant Bulbs

#### **OPTION 1:**

No import permit is required

PEQ: None

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:**

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

**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, Xylella fastidiosa

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

**Note:** Only applies to members of the *Ocimum* genus.

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

#### 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

**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)

**Note:** Only applies to members of the *Ocimum* genus.

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

# C. 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 pseudosolanacearum	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective media <b>OR</b> PCR	Applies to <i>Anthurium</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 *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 Plants

**PEQ:** Level 2

**Minimum 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:

- 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:

## Araucaria

The entry conditions in 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

Note:

# 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*.

Arbutus

The entry conditions in 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 Plants

**PEO:** 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* 

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 *Cinnamomum* 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

#### Note:

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 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 members of the *Arctostaphylos*, *Laurus* and *Magnolia* genera
 Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

Aronia

The entry conditions in 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

- 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 *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

Artocarpus

**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.

Arum

*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:**

**PEO:** 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."

Asparagus

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

PEO: Level 3B

Minimum Period: 3 months

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

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

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*.

Aster

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

PEO: Level 2

Minimum Period: 3 months

a.	Conditions for Aster yellows phytoplasma
	Additional Declaration: "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".

#### Beaucarnea

*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.

Note: The entry conditions in this schedule only apply to species in the Plants Biosecurity

Begonia

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:**

**PEO:** 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."

**Berberis** 

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".

**Bidens** 

*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 PEO greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

**Bowenia** 

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.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity

Caladium

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.

PEO: 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:**

PEO: 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
 Additional Declaration: "The cultures have been derived from parent stock free of Caladium virus X."

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

#### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Orchid fleck dichorhavirus, Phytophthora capsici, Phytophthora palmivora, Tetranychus kanzawai, Uredinales

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

#### A. For Whole Plants

PEO: 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 Orchid fleck dichorhavirus

Growing season inspection in post-entry quarantine for symptom expression.

c. 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*".
- d. 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

Camellia

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 Plants

**PEQ:** Level 2

**Minimum Period:** 3 months

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

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

Note: Only applies to the following species: Camellia japonica

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

#### **B.** For Cuttings

**PEO:** Level 2

**Minimum Period:** 3 months

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

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Additional Declaration

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

#### C. For Tissue Cultures

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

# Camellia sinensis

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

# **GENERAL CONDITIONS:**

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

Quarantine Pests: Exobasidium vexans, Phellinus noxius, Phloem necrosis, Phytophthora ramorum, Tetranychus kanzawai

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

# A. For Whole Plants

PEQ: Level 3B

**Minimum Period**: 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

# **B.** For Tissue 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)

Canna

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 greenhouse</u>, 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."

Carica

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

PEO: 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

Note: The entry conditions in 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
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 <i>Phytophthora ramorum</i> (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

Carya

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

PEO: 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

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under "Fusicladium effusum and Pecan bunch are not known to occur in \_\_\_\_\_\_[the country or state where the plants were grown]". Carya ovata 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: PEO:** Level 2 **Minimum Period:** 3 months a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) Note: Only applies to members of the Carya and Ostrya genera b. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Note:** Only applies to the members of the *Liriodendron* genus Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from Xylella fastidiosa c. Additional Declaration "Cryphonectria parasitica is not known to occur in \_\_\_\_\_ [the country or state where the plants/cuttings were produced]". **OPTION 2: PEQ:** Level 3B Minimum Period: 6 months a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Carya* and *Ostrya* genera

b. Conditions for Xylella fastidiosa (section 2.2.1.12) Note: Only applies to

the members of the Liriodendron genus

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

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 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

Castanea

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

# **GENERAL CONDITIONS:**

**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)

**PEO**: 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 winspected) during the previous growing season and no <i>Cryphonectria parasitica Ceratocystis fagacearum</i> was detected."		

Note:

**Cedrus** 

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

# **GENERAL CONDITIONS:**

**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

The entry conditions in 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

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a.	( `O1	ndition	s tor	Urec	lına	les

Additional Declaration: "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".

# Note:

#### 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 greenhouse</u>, for tissue cultures from countries <u>not</u> 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

*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.*" Additional Declaration: "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:

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 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 greenhouse</u>, 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:

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 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.

*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

PEO: 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 PEO greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

Citrus

#### Guidance:

Citrus nursery stock (plants for planting) is no longer eligible for import under this schedule.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Import requirements for *Citrus* plants for planting are now set out in: Import Health Standard: *Citrus* Plants for Planting, available on the plant imports website at: <a href="https://www.mpi.govt.nz/import/plantsflowers-seeds-plant-growing-products/nursery-">https://www.mpi.govt.nz/import/plantsflowers-seeds-plant-growing-products/nursery-</a>

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."

Convallaria

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Pratylenchus convallariae

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

A. For Whole Plants

PEQ: Level 2

**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
a. Conditions for *Pratylenchus convallariae*Additional Declaration: "*Pratylenchus convallariae* is not known to occur in \_\_\_\_\_

[the country or state where the plants were grown]".

Corylus

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

**PEO**: Level 3B

**Minimum Period**: 3 months

Cotoneaster

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

#### **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine Pests: Gymnosporangium spp., 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 not recognised by MPI as free from *Xylella fastidiosa*.

Crataegus

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

# **GENERAL 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 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**

PEQ: 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] in \_\_\_\_\_\_[the country or state in which the plants were grown]".
  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**

PEQ: Level 3B

**Minimum Period:** 3 months

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

As for <b>Standard Entry Conditions for Tissue Cultures</b> - 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.
Crocosmia

health standard.

**GENERAL CONDITIONS:** 

**Approved Countries:** All

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

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

Crocus

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

PEO: 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

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

Note:

Cycas

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.

Dahlia

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

# **GENERAL CONDITIONS:**

**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. F	'nr	W	nole	Pla	ants
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PEQ: Level 2

Minimum Period: 3 months

a. Conditions for Uredinales

Additional Declaration: "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

# **PEQ:** 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 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.

Dendrobium

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity

Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Dendrobium*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Orchid fleck dichorhavirus, Phytophthora palmivora

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 Orchid fleck dichorhavirus

Growing season inspection in post-entry quarantine for symptom expression.

b. Conditions for *Phytophthora palmivora* 

Note: Only applies to members of the genus: Cymbidium

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

Delphinium

*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

**PEO**: 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 *Clematis, 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

Additional Declaration: "I	Rust diseases	of genus <i>Coleo</i> s	sporium and	Cronatium a	re not
known to occur on	[the host	species being i	mported] in _	[tl	he
country in which the plant	ts 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:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

**Note:** Only applies to the members of the *Clematis, 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 PEQ greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

**Dianthus** 

*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 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 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.

**Note:** The entry conditions in 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 Dianthus caryophyllus", and are additional to those specified in sections 1, 2 and 3 of the import health standard. **GENERAL CONDITIONS:** 

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

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

# Ministry for Primary Industries Import Health Standard 155.02.06: Importation of Nursery Stock

A. For Whole Plants OPTION 1:

**Minimum Period**: 3 months

**Approved Countries**: All

Phytophthora palmivora

PEQ: Level 2

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

- b. 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  $1.5^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$  for 2 days, then fumigated with methyl bromide at  $14\text{g/m}^3$  for 4 hours at  $15^{\circ}\text{C}$  and packed so that re-infestation with insects cannot occur."
- 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

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

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.

**Note:** The entry conditions in 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

PEO: 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 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

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".

**AND** 

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

#### OR

1. "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.

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

**PEO:** 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

1. "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
 Additional Declaration: "The cultures have been derived from parent stock tested and found free of virus diseases."

# **Diospyros**

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

# **GENERAL CONDITIONS:**

**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 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
- c. 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*

# Dracaena

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

# **GENERAL CONDITIONS:**

**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

PEO: 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.

Table 1 Alternate treatment for *Dracaena deremensis* 

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

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

#### Measures for Pantoea ananatis:

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

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

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

# **Epipremnum**

**Note:** The entry conditions in 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

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

# OR

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

OR

- vi) "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.

**Eucalyptus** 

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

#### **GENERAL CONDITIONS:**

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

#### **OPTION 1:**

- i) Additional Declaration
  - "Puccinia psidii s.l. complex (including Uredo rangelii) is not known to occur in \_\_\_\_\_[the country of origin]".

OR

- "The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (5973.4°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

**PEO**: 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 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
   Guidance for importers: Tissue cultures which are imported under Option 2 of the conditions for *Puccinia psidii* s.l. complex, AND require PEQ under section 2.2.2.5, must complete the PEQ requirements for *Puccinia psidii* before being deflasked into the PEQ greenhouse.
- b. Conditions for Puccinia psidii s.l. complex

#### **OPTION 1:**

- i) Additional Declaration
  - "Puccinia psidii s.l. complex (including Uredo rangelii) is not known to occur in \_\_\_\_\_[the country of origin]".

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

# **OPTION 2:**

As per section 2.2.2.4, an import permit is required

**PEO**: Level 2 Tissue culture laboratory

Minimum Period: 4 weeks

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

Eupatorium

The entry conditions in 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

Additional Declaration:	"Rust diseases of genus Coleosporium and	d Cronatium are not
known to occur on	[the host species being imported] in	[the
country in which the pla	ints 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 greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

Eutrema

The entry conditions in 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

PEO: 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.

**Fagus** 

The entry conditions in 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 greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

Fagus sylvatica

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 greenhouse</u>, 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

PEO: 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*.

PEO: 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 6 months for nursery stock sourced from countries not 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 stem
- c. 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*
- d. 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*".

# Fortunella

# Guidance:

Fortunella nursery stock (plants for planting) is no longer eligible for import under this schedule.

Import requirements for Fortunella plants for planting are now set out in: Import Health Standard: *Citrus* Plants for Planting, available on the plant imports website at: <a href="https://www.mpi.govt.nz/import/plants-flowers-seeds-plant-growing-">https://www.mpi.govt.nz/import/plants-flowers-seeds-plant-growing-</a>

products/nurserystock/requirement-documents-for-importing-nursery-stock/

**Note:** The entry conditions in 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) <u>Documentation</u>

**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 Ouarantine 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) <u>Documentation</u>

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Fragaria* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

# (ii) Phytosanitary requirements

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

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

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

#### **AND**

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

#### AND

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

# (iii) Additional declarations to the phytosanitary certificate

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

must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section. No additional declarations are required.

# (iv) Post-entry quarantine

**PEQ**: All *Fragaria* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility 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 strawberry rhynchites

Bruchidae

Zabrotes arenarius strawberry weevil

Cantharidae

Chauliognathus lugubris soldier beetle

Carabidae

Calathus fuscipes ground beetle

Harpalus affinisstrawberry seed beetleHarpalus rufipesstrawberry seed beetleNebria brevicolliscommon black ground beetlePterostichus cupreusstrawberry ground beetlePterostichus madidusstrawberry ground beetlePterostichus melanariusstrawberry ground beetle

Chrysomelidae

Altica caerulescens leaf beetle

Chaetocnema concinnaleaf feeding beetleColaspis flavidagrape colaspisGaleruca tanacetistrawberry leaf beetleGalerucella grisescensstrawberry leaf beetleGalerucella tenellastrawberry leaf beetle

Haltica corruscafles beetleHaltica paganaflea beetle

Paria fragariae strawberry rootworm

Systena frontalis flea beetle

Curculionidae

Anthonomus rubi strawberry blossom weevil Anthonomus signatus strawberry bud weevil

Apirocalus spp. weevils

Barypeithes pellucidusstrawberry weevilCleonus kirbyiradish weevilConotrachelus nenupharplum weevilDonus salviaestrawberry weevil

Dyslobus decoratus decorated strawberry root weevil
Dyslobus ursinus western strawberry root weevil
Dyslobus wilcoxi Lacomb strawberry root weevil

Geoderces spp. root weevil
Haplidia etrusca root weevil

Hypera brunneipennis Egyptian alfalfa weevil

Myllocerus undecimpustulatus grey weevil

Nemocestes fragariae strawberry root weevil

Nemocestes incomptus woods weevil

Nemocestes longulusstrawberry root weevilNemocestes sordidusstrawberry root weevil

Orthorhinus aethops weevil

Otiorhynchus armatusstrawberry root weevilOtiorhynchus clavipesred-legged weevilOtiorhynchus cribricolliscribrate weevil

Otiorhynchus meridionalisstrawberry root weevilOtiorhynchus rotundatusstrawberry root weevilOtiorhynchus rugifronsstrawberry root weevilOtiorhynchus singularisstrawberry root weevil

Panscopus torpidusroot weevilPeritelopsis globiventrisgrey weevilPlinthodes taeniatusroot weevilPolydrusus cervinusweevil

Polydrusus sericeusgreen leaf weevilRhadinosomus lacordaireithin strawberry weevilRhinaria perdixstrawberry weevilRhynchites germanicusstrawberry rhynchitesSciaphilus asperatusstrawberry root weevilSciopithes obscurusobscure root weevil

Sitona hispidulusroot weevilStrophomorphus porcellusweevilThricolepis inornataroot weevilTrigonoscuta pilosaroot weevil

Tyloderma fragariae strawberry crown borer

Elateridae

Agriotes spp. (species not in New Zealand) click beetles

Nitidulidae

Carpophilus fumatussap beetleGlischrochilus hortensissap beetleLobiopa insularisstrawberry borerStelidota spp.sap beetles

Stelidota geminata strawberry sap beetle

Scarabaeidae

Anoplognathus porosus Christmas beetle

Cetonia spp. chafers

Cyclocephala borealis northern masked chafer

Hoplia spp.white grubsLepidiota frenchiFrench's cane grubMelolontha melolonthacockchaferMetanastes vulgivagusblack beetlePhyllopertha horticolagarden chaferPhyllophaga decimlineataten-lined June beetle

Phyllophaga perversa western ten-lined June beetle

Popillia japonicaJapanese beetleRepsimus aeneuswhite grub

Rhopaea magnicornis large pasture scarab

Serica spp.white grubsSericesthis geminatapriunose scarabSericesthis nigrolineatadusky pasture scarab

Scolytidae

Poecilips cardamomi bark beetle

Silphidae

Heterosilpha aenescens carrion beetle

Collembola Sminthuridae

Pourlatiella amalia donachaguna

Bourletiella arvalis dorsobscuragarden springtailSminthurus multidentatusgarden springtail

**Diptera** 

Agromyzidae

Agromyza fragariae strawberry leafminer

Agromyza spiraeae rose leafminer

Tipulidae

Tipula spp leatherjackets

Hemiptera

Anthocoridae

Orius laevigatus plant bug

Lvgaeidae

Euander lacertosus lygaeid bug
Nysius clevelandensis grey cluster bug

Nysius spp. bugs

Nysius vinitor Rutherglen bug

Miridae

Calocoris hobartensis capsid

Lygocoris pabulinuscommon green capsidLygus elisuspale legume bugLygus hesperustarnished plant bugLygus lineolaristarnished plant bugLygus rugulipennistarnished plant bug

Plagiognathus arbustorumstink bugPlagiognathus chrysanthemistink bugScolopostethus spp.plant bugs

Pentatomidae

Acrosternum hilare green stink bug
Dolycoris baccarum stink bug

Pvrrhocoridae

Dindymus versicolor harlequin bug

Homoptera Aleyrodidae

Aleyrodes lonicerae strawberry whitefly

Trialeurodes fernaldi whitefly

Trialeurodes packardi strawberry whitefly

Trialeurodes ruborum whitefly

Aphididae

Acyrthosiphon malvae rogersiistrawberry aphidAmphorophora agathonicastrawberry aphidAphis fabaebean aphid

Aphis forbesi strawberry root aphid

Aphis gossypii [vector]cotton aphidAphis rubifoliiraspberry aphidAulacorthum solani [vector]foxglove aphidChaetosiphon jacobistrawberry aphidChaetosiphon minuslesser strawberry aphidChaetosiphon tetrarhodum [vector]strawberry aphid

strawberry aphid Chaetosiphon thomasi Fimbriaphis fimbriata rose aphid Fimbriaphis wakibae rose aphid Macrosiphum pelargonii rose aphid Macrosiphum rosae [vector] rose aphid Myzaphis rosarum [vector] lesser rose aphid Myzus ascalonicus [vector] shallot aphid ornate aphid Myzus ornatus [vector] Myzus persicae [vector] green peach aphid

Rhodobium porosum aphid

**Aphrophoridae** 

Aphrophora alni spittlebug

Aphrophora permutata rhubarb spittlebug

Cercopidae

Cercopis vulnerata red and black froghopper

Emelyanoviana molliculaspittlebugEvacanthus interruptusspittlebugPhilaenus leucophthalmusspittlebug

Cicadellidae

Aphrodes bicinctus strawberry leafhopper

Apogonalia grossaleafhopperCoelidia olitorialeafhopperEdwardsiana spp.leafhoppersEmpoasca fabaepotato leafhopper

Erythroneura elegantula western grape leafhopper

Euscelis spp. leafhoppers

Macrosteles spp.leafhoppersScaphytopius acutusleafhopperZygina schneiderileafhopper

Pseudococcidae

Chorizococcus arecae mealybug

Dysmicoccus brevipespineapple mealybugPlanococcus citricitrus mealybugRhizoecus kondonisKondo mealybug

Hymen optera

Tenthredinidae

Allantus calceatus sawfly

Allantus cinctus curled rose sawfly
Cladius pectinicornis antler sawfly

Lepidoptera Gelechiidae

Aristotelia fragariae strawberry crown miner

Compsolechia fragariella western strawberry leafroller

Geometridae

Ascotis selenaria mugwort looper

Hepialidae

Hepialus lupulinus swift moth

Noctuidae

Agrotis spp. (species not in New Zealand)cutwormsAgrotis mundabrown cutwormAgrotis segetumturnip moth

Amphipoea interoceanicastrawberry cutwormHelicoverpa punctigeraoriental tobacco budworm

Helicoverpa zeabollwormHydraecia interoceanicanoctuid moth

Noctua pronubalarge yellow underwingOrthosia hibiscispeckled green fruitwormPeridroma sauciapearly underwing mothPhlogophora meticulosaangleshades mothSpodoptera exigualesser armywormSpodoptera suniacluster caterpillarXestia c-nigrumspotted cutworm

**Psychidae** 

Hyalarcta huebneri leaf case moth

Pyralidae

Loxostege spp. pyralid moths
Udea rubigalis celery leaftier

Sesiidae

Synanthedon bibionipennis strawberry crown moth

Tortricidae

Acleris comarianastrawberry tortrix mothAncylis comptanastrawberry leafrollerAncylis fragariaestrawberry leafrollerArgyrotaenia citranaorange tortrixCacoecimorpha pronubanacarnation leafrollerChoristoneura lafauryanastrawberry leafrollerChoristoneura rosaceanaoblique-banded leafroller

Claremontia confusa leafroller

Clepsis busckanacyclamen leafrollerClepsis spectranastraw coloured tortrix

Cnephasia asseclana leafroller

Cnephasia longana omnivorous leaftier

Cnephasia stephensiana leaftier

Compsolechia fragariella western strawberry leafroller

Cryptoptila immersana ivy leafroller Epiphyas spp. leafrollers

Lozotaenia forsteranaleafrollerOlethreutes lacunanafruit tree tortrixOlethreutes olivaceanafruit tree tortrixPandemis dumetanafruit tree tortrixPlatynota stultanaomnivorous leafrollerPtych oloma peritanagerden tortriy

Ptycholoma peritanagarden tortrixSparganothis sulfureanablueberry leafroller

Orthoptera Acrididae

Phaulacridium vittatum wingless grasshopper

Gryllotalpidae

Gryllotalpa africana African mole cricket

Gryllotalpa gryllotalpa mole cricket

Scapteriscus acletus southern mole cricket Scapteriscus vicinus tawny mole cricket

Pyrgomorphidae

Atractomorpha crenaticeps grasshopper

Thysanoptera Thripidae

Scirtothrips dorsalis chilli thrips

Scolothrips sexmaculatus

Thrips atratus carnation thrips
Thrips major rose thrips

Mites

Arachnida

Acarina

Diptilomiopidae

Diptacus fragarifoliae false spider mite

Tetranychidae

Tetranychus kanzawaii mite

Tetranychus lobustusstrawberry spider miteTetranychus neocalendonicusMexican spider mite

Tetranychus pacificus

Pacific spider mite

Nematodes

Adenophorea

Dorylaimida

Longidoridae

Longidorus elongatus [vector]

Longidorus sylphusneedle nematodeParalongidorus maximusneedle nematodeXiphinema americanum [Vector]dagger nematodeXiphinema chambersidagger nematodeXiphinema diversicaudatum [vector]dagger nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides besseyi rice white-tip nematode

Belonolaimidae

Belonolaimus gracilis sting nematode

Criconematidae

Criconemoides curvatum ring nematode
Criconemoides lobatum ring nematode

Dolichodoridae

Tylenchorhynchus claytoni tobacco stunt nematode

Heteroderidae

Heterodera spp. cyst nematode

Hoplolaimidae

Hoplolaimus spp. crown-headed lance nematode

Helicotylenchus microlobusspiral nematodeRotylenchulus buxophilusreniform nematodeRotylenchulus goodeyireniform nematodeScutellonema brachyurusspiral nematode

Paratylenchidae

Paratylenchus macrophallus pin nematode

Pratylenchidae

Pratylenchus brachyurusroot lesion nematodePratylenchus coffeaecoffee root lesion nematodePratylenchus loosiroot lesion nematode

Pratylenchus scribneriScribner's root lesion nematodePratylenchus zeaecorn root lesion nematodeRadopholus similisburrowing nematode

Myriapod Diplopoda Polydesmida Xystodesmidae

Pleuroloma flavipes millipede

Molluscs Gastropoda Stylommatophora Helicidae Trichia striolata strawberry snail

Fungi

Ascomycota

**Dothideales** 

Mycosphaerellaceae

Mycosphaerella louisianae purple leaf spot

**Eurotiales** 

Trichocomaceae

Byssochlamys fulva byssochlamys rot

Hypocreales

Hypocreaceae

Schizoparme straminea (anamorph Coniella schizoparme fruit rot

castaneicola)

Leotiales

Leotiaceae

Discohainesia oenotherae (anamorph Hainesia lythri) leaf spot

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria bulbosa armillaria root rot Armillaria mellea (anamorph Rhizomorpha armillaria root rot

subcorticalis)

Armillaria tabescens armillaria root rot

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)

Sphaeropsidales

Leptostromataceae

Kabatia fragariae leaf spot

Sphaerioidaceae

Coniella fragariae flower spot

Phyllosticta fragaricola phyllosticta leaf spot

Rhabdospora fragariae leaf spot

Septoria fragariaeseptoria spotSeptoria fragariaecolaseptoria spotStagonospora fragariaestagonospora

**Unknown Coelomycetes** 

**Unknown Coelomycetes** 

Colletotrichum spp. (species not in New Zealand)

Glomerella cingulata (anamorph Colletotrichum strawberry anthracnose

gloeosporioides)

Marssonina canadensisleaf scorchMarssonina pakistanicaleaf scorchMarssonina potentillaeleaf scorchPestalotia longisetulaleaf spot

Pilidiella quercola schizoparme fruit rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales Dematiaceae

Cercospora fragariae leaf spot

Cercospora vexans cercospora leaf spot

Idriella lunata root rot

Moniliaceae

Ramularia fragariae ramularia leaf spot Verticillium albo-atrum [severe strain] progressive wilt

Tuberculariales Tuberculariaceae

Fusarium oxysporum f. sp. fragariae stub wilt

Oomycota

Peronosporales

Peronosporaceae

Peronospora fragariaedowny mildewPhytophthora capsicifruit rot of peppers

Pythiales Pythiaceae

Pythium debaryanumroot rotPythium dissotocumroot rotPythium hypogynumroot rot

Pythium perniciosum root and stem rot

Pythium sylvaticum root rot

**Zygomycota: Zygomycetes** 

Mucorales Mucoraceae

Mucor recurvus mucor rot

Rhizopus spp.

Bacteria

-

Erwinia pyrifoliae

Ralstonia solanacearum (Race 2) moko disease

Strawberry marginal chlorosis ['Candidatus

phlomobacter fragariae'] Strawberry rickettsia yellows

Xanthomonas arboricola pv. fragariae bacterial leaf blight Xanthomonas fragariae angular leaf spot Xylella fastidiosa\* Pierce's disease

#### Viruses

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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 pseudo mua yeuow eage 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**

٠.

Aster yellows phytoplasma Clover phyllody phytoplasma

Clover proliferation phytoplasma
Clover yellow edge phytoplasma
Stolbur phytoplasma
STRAWR1 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

# Inspection, Testing and Treatment Requirements for Fragaria

ORGANISM TYPES MPI-ACCEPTED METHODS	ORGANISM TYPES	MPI-ACCEPTED METHODS
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Mites	Visual inspection <b>AND</b> approved miticide treatments as described in
wittes	
	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 <i>in vitro</i> only]
Nematodes	Growing season inspection in PEQ for symptoms of foliar nematodes
Fungi	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility.
	Growing season inspection in PEQ for symptom expression
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 (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 AND PCR
Ralstonia solanacearum (Race 2)	Growing season inspection for symptom expression.
Strawberry marginal chlorosis	Growing season inspection for symptom expression AND PCR
('Candidatus phlomobacter fragariae')	
Strawbarry riakattaia vallawa	Growing season inspection for symptom expression
Strawberry rickettsia yellows  Xanthomonas arboricola pv.	Growing season inspection for symptom expression  Growing season inspection for symptom expression AND PCR
fragariae	Growing season inspection for symptom expression AND PCK
Xanthomonas fragariae	Growing season inspection for symptom expression AND PCR
Xylella fastidiosa	Growing season inspection for symptom expression Trub Tele
Ayiena fastiaiosa	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	Graft inoculation (2 indicators; Fragaria vesca cl. UC4 or UC5, or cv.
edgeassociated 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 ( <i>Fragaria vesca</i> cl.UC5 or UC6, or cv. Alpine. or
T. 1	Fragaria virginiana cl. UC12) AND PCR
Tobacco necrosis virus [strains not in New Zealand]	Herbaceous indicators ( <i>Chenopodium quinoa and Cucumis sativus</i> ) <b>AND</b> ELISA <b>or</b> PCR
Tobacco streak virus [strains not in	Herbaceous indicators ( <i>Chenopodium quinoa</i> and
New Zealand]	Cucumis sativus)
Tomato bushy stunt virus	Herbaceous indicator ( <i>Chenopodium quinoa</i> )
Tomato ringspot virus	Herbaceous indicators ( <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i> )
20 interportation	AND ELISA or PCR
Phytoplasmas	Growing season inspection <b>AND</b> nested PCR <b>or</b> real time PCR
Diseases of unknown aetiology	
Strawberry feather leaf disease	Graft inoculation (Fragaria vesca cl. UC1 or UC4, or cv. Alpine)
Strawberry lethal decline disease	Graft inoculation (Fragaria vesca cv. Alpine)
	-

- 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

Freesia

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: PEO:** 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:**

**PEO:** 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

**Fuchsia** 

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

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

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity

\*\*Gaultheria\*\*

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.

**Note:** The entry conditions in 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

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

a. 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

Gerbera

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

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

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.

**Note:** The entry conditions in 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** 

*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

PEO: 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: PEO:** 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.

Glycyrrhiza

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.

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:**

PEO: 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

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) <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) *Phytosanitary requirements*

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Hippeastrum* dormant bulbs have been:

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

#### **AND**

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

#### **AND**

- sourced from a 'pest free area', 'pest free place of production' or 'pest free production site', free from regulated bacteria.

#### AND

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

#### ΔND

- 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:

<sup>&</sup>quot;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

#### PEO: 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*.

Note:	The entry conditions in this schedule only apply to species in the Plants Biosecurity <b>AND</b>

- 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

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity 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 coffeaecoffee root lesion nematodePratylenchus scribneriScribner's root lesion nematode

**Fungus** 

**Basidiomycota: Basidiomycetes** 

Agaricales

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha subcorticalis)

armillaria root rot

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.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity 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

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 not 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* 

Hydrangea

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

**PEO**: 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 not recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Phellinus noxius* (section 2.2.1.13) **Note**: Only applies to the following species: *Hydrangea chinensis* and *Morus alba*

# **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 PEQ greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

Ipomoea batatas

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

PEO: 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* 

Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Iris*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# 1. Type of Iris nursery stock approved for entry into New Zealand

Whole plants

Dormant bulbs

Plants in tissue culture

#### 2. Pests of Iris

Refer to the pest list.

#### 3. Entry conditions for:

#### 3.1 Iris whole plants and dormant bulbs from any country

#### (i) Documentation

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

#### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Iris* dormant bulbs or whole plants have been:

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

#### **AND**

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

#### **AND**

- sourced from a 'pest free area', 'pest free place of production' or 'pest free production site', free from regulated bacteria and viruses.

#### **AND**

- treated for regulated insects and mites as described in section 2.2.1.6 [whole plants] or section 2.2.1.7 [dormant bulbs] of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

#### **AND**

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

# (iii) Additional declarations to the phytosanitary certificate

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

"The *Iris* dormant bulbs or whole plants [choose one] in this consignment have been:

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

#### **AND**

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

#### (iv) Post-entry quarantine

# Whole plants and dormant bulbs

PEQ: Level 1

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

#### ΔND

- 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) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Iris* plants in tissue culture have been:

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

#### **AND**

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

#### AND

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Tobacco rattle virus*.

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

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

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

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

#### **AND**

- tested using molecular/ serological methods [choose ONE option] and found free of *Tobacco rattle virus*."

#### (iv) Post-entry quarantine

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

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

**Import permit:** an import permit is required.

PEQ: Level 3B

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

Noctuidae

Hydraecia micacea potato stem borer

Macronoctua onusta iris borer

Thysanoptera Thripidae

Frankliniella iridis iris thrips

Mite

Arachnida

Acarina

Tarsonemidae

Steneotarsonemus laticeps bulb scale mite

Nematode

Secernentea

Tylenchida

Criconematidae

Hemicycliophora typica sheath nematode

Dolichodoridae

Tylenchorhynchus gaudialis -

Hoplolaimidae

Rotylenchus goodeyi spiral nematode

Meloidogynidae

Meloidogyne arenaria peanut root knot nematode

Meloidogyne ichinohei -

**Fungus** 

Ascomycota

**Dothideales** 

Leptosphaeriaceae

Trematosphaeria heterospora ---

Leotiales

#### Sclerotiniaceae

Botryotinia convoluta (anamorph Botrytis convallariae) stem rot Botryotinia polyblastis (anamorph Botrytis polyblastis) fire disease Sclerotinia bulborum black slime

**Basidiomycota: Basidiomycetes** 

Agaricales

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha subcorticalis) armillaria root rot

Lachnocladiales

Lachnocladiaceae

Scytinostroma eurasiaticogalactinum white root rot

**Phallales** 

Hysterangiaceae

Hysterangium boudieri --

mitosporic fungi (Agonomycetes)

Agonomycetales

unknown Agonomycetales

Rhizoctonia tuliparum basal rot Sclerotium rolfsii var. delphinii sclerotium rot

**Bacterium** 

Pseudomonadaceae

Burkholderia gladioli pv. gladioli bacterial rot

Virus

Broad bean wilt virus Iris fulva mosaic virus Iris germanica leaf stripe virus Japanese iris necrotic ring virus Tobacco rattle virus [strains not in New Zealand] -

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

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.

**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

Kalmia

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

- a. 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.

Liatris

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
	Additional Declaration: "Rust diseases of genus Coleosporium and Cronatium are not
	known to occur on[the host species being imported] in[the
	country in which the plants were grown]".

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

#### **OPTION 1:**

No import permit is required

PEQ: None

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. PEON Name of Level 2 (see below)

**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.

Lilium

**Note:** The entry conditions in 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) <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) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

#### The *Lilium* dormant bulbs have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

#### AND

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

#### **AND**

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

#### **AND**

- sourced from a 'pest free area', 'pest free place of production' or 'pest free production site', free from regulated bacteria and viruses.

#### AND

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

# (iii) Additional declarations to the phytosanitary certificate

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

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

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

#### **AND**

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

#### **AND**

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

#### **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) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Lilium* plants in tissue culture have been:

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

#### **AND**

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

#### **AND**

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Apple stem grooving virus* and *Tobacco rattle virus*.

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

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

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

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

#### **AND**

- tested using molecular/ serological methods [choose ONE option] and found free of *Apple stem grooving virus* and *Tobacco rattle virus*."

#### (iv) Post-entry quarantine

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

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

**Import permit:** an import permit is required.

PEQ: Level 3B

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

# Pest List for Lilium

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

Insect Insecta

Collembola

Entomobryidae

Entomobrya multifasciata

Springtail

Lepidoptera Yponomeutidae

Acrolepiopsis lilivora

Mite

Arachnida

Acarina

Acaridae

Schwiebea cuncta -Schwiebea taiwanensis -

Tenuipalpidae

Brevipalpus lilium false spider mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Xiphinema insigne dagger nematode

Trichodoridae

Paratrichodorus spp. (except P. lobatus, P. minor, P. -

pachydermus, P. porosus)

Trichodorus spp. (except T. christiei, T. cottieri, T.

porosus, T. primitivus)

Secernentea

Tylenchida

Meloidogynidae

*Meloidogyne* spp. (except *M. ardenensis*, *M. hapla*, *M.* 

incognita, M. javanica, M. naasi)

Pratylenchidae

Pratylenchus brachyurus root lesion nematode

**Fungus** 

Ascomycota

**Dothideales** 

Mycosphaerellaceae

Didymellina intermedia black rot
Mycosphaerella martagonis black blotch

**Basidiomycota: Basidiomycetes** 

Agaricales

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha subcorticalis) armillaria root rot

Auriculariales Auriculariaceae

Helicobasidium mompa violet root rot

**Basidiomycota: Teliomycetes** 

**Uredinales** 

Pucciniaceae

Puccinia sporoboli (anamorph Aecidium lilii) Rust Uromyces aecidiiformis rust fungi

Uromyces holwayi -

mitosporic fungi (Agonomycetes)

Agonomycetales

unknown Agonomycetales

Rhizoctonia tuliparum basal rot
Sclerotium rolfsii var. delphinii sclerotium rot
Sclerotium wakkeri Blackleg

mitosporic fungi (Coelomycetes)

Sphaeropsidales Sphaerioidaceae

Macrophoma lilii black root rot

Ministry for Primary Industries Import Health Standard 155.02.06: Importation of Nursery Stock

Phyllosticta liliicola black rot unknown Coelomycetes unknown Coelomycetes Colletotrichum lilii mitosporic fungi (Hyphomycetes) Hyphomycetales Moniliaceae Botrytis hyacinthi hyacinth blight white mould Ramularia vallisumbrosae Oomycota **Peronosporales** Peronosporaceae Phytophthora capsici Fruit rot of peppers **Tuberculariales** Tuberculariaceae Fusarium oxysporum f. sp. basal rot lilii unknown Hyphomycetes unknown Hyphomycetes Aureobasidium microstictum **Bacterium** Enterobacteriaceae Erwinia lilii Virus Apple stem grooving virus [strains not in New Zealand] Lily rosette virus

Tobacco rattle virus [strains not in New Zealand]

Tomato ringspot virus

Litchi

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

## **GENERAL CONDITIONS:**

**Approved Countries**: Australia

Quarantine Pests: Aceria litchii, Phellinus noxius, Xyloryctidae (Lepidoptera)

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

#### A. For Whole Plants

PEO: Level 2

**Minimum 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

*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

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

Malus

*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].

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

## 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 postentry 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) <u>Documentation</u>

**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)**

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 femorataflatheaded apple tree borerChrysobothris maliPacific flatheaded borerChrysobothris spp.flat-headed borers

Sphenoptera lafertei flatheaded peach tree borer

Cerambycidae

Aeolesthes sarta Quetta borer

Apriona germarii mulberry longicorn beetle

Apriona japonica mulberry borer Bacchisa fortunei pear borer

Batocera rufomaculata red-spotted longhorn beetle

Phryneta spinator

Curculionidae

Anthonomus piri apple bud weevil
Eremnus atratus black weevil

Eremnus cerealis western province grain worm

Eremnus setulosus grey weevil

Scolytidae

Hypothenemus obscurusapple twig borerScolytus japonicusJapanese bark beetleScolytus rugulosusfruit bark borer

Diptera

Cecidomyiidae

Resseliella oculiperda red bud borer
Thomasiniana oculiperda red bud borer

Hormptera

#### **Aphididae**

Aphis spiraecola spiraea aphid

Diaspididae

Chrysomphalus aonidumFlorida red scaleChrysomphalus dictyospermiSpanish red scaleDiaspidiotus africanusgrey scale

Lepidoptera

Cossidae

Coryphodema tristis quince trunk borer

Gelechiidae

Recurvaria syrictis bud moth

Gracillariidae

Marmara elotellaapple barkminerMarmara pomonellaapple fruitminer

Oecophoridae

Cryptophasa melanostigma fruit tree borer

**Pyralidae** 

Euzophera semifuneralis American plum borer
Ostrinia nubilalis European corn borer

Sesiidae

Thamnosphecia pyri apple bark borer Synanthedon scitula pecan tree borer

Mite

#### Arachnida

## Acarina

## Eriophyidae

Aculops malus eriophyid mite

Eriophyes mali Willamette spider mite

Phyllocoptes malieriophyid miteCenopalpus chitraliensisbryobia miteCenopalpus haqiibanana mite

Cenopalpus orakiensis Bailey's apple rust mite

Cenopalpus pulcher flat scarlet mite

Tenuipalpidae

Brevipalpus liliumfalse spider miteBrevipalpus obovatusprivet miteTenuipalpus taonicusPacific miteRhinotergum schestovicimite

Tetranychidae

Eotetranychus carpini false spider mite
Eotetranychus uncatus Lewis spider mite

Eotetranychus willametteihazel miteOligonychus gossypiitetranychid miteOligonychus newcomerispider mite

Ministry for Primary Industries Import Health Standard 155.02.06: Importation of Nursery Stock Oligonychus yothersiavocado red miteTetranychus canadensisfour spotted spider miteTetranychus kanzawaiKanzawa spider miteTetranychus mcdanieliMcDaniel spider miteTetranychus schoeneiSchoenei spider miteAmphitetranychus viennensishawthorn spider mite

**Tydeidae** 

Tydeus spp. tydeid mites

**Fungus** 

**Ascomycota: Ascomycetes** 

**Diaporthales** 

Valsaceae

Diaporthe tanakae (anamorph Phomopsis tanakae) pear canker Leucostoma auerswaldii leucostoma canker

**Diatrypales** 

Diatrypaceae

Eutypella sorbi stem disease

**Dothideales** 

Mycosphaerellaceae

Mycosphaerella pyri (anamorph Septoria pyricola) leaf fleck of pear

Mycosphaerella tulasnei rot

Schizothyriaceae

Schizothyrium perexiguum greasy blotch

**Erysiphales** 

Erysiphaceae

Pleochaeta mali powdery mildew

**Heotiales** 

Dermateaceae

Diplocarpon maliblack spotPezicula perennansperennial canker

Sclerotiniaceae

Grovesinia pyramidalis (anamorph Cristulariella moricola) target spot Monilinia laxa f. sp. mali brown rot

Monilinia malimonilinia leaf blightMonilinia fructigena (anamorph Monilia fructigena)European brown rot

Sclerotinia spp. neck rot

**Rhytismatales** 

Cryptomycetaceae

Potebniamyces pyri (anamorph Phacidiopycnis piri) Phacidiopycnis rot

Sordariales

Chaetomiaceae

Chaetomium spp. fruit rot

**Taphrinales** 

**Taphrinaceae** 

Taphrina bullata leaf blister

**Xylariales** 

Xvlariaceae

Biscogniauxia marginatanailhead cankerDaldinia vernicosawood rotXylaria maliblack root rot

Ascomycota: Saccharomycetes Saccharomycetales

Endomycetaceae

Endomycopsis mali rot

**Basidiomycota: Basidiomycetes** 

Agaricales

Coprinaceae

Coprinus psychromorbidus coprinus rot

Tricholomataceae

Armillaria melleaarmillaria root rotArmillaria ostoyaearmillaria root rotArmillaria tabescensarmillaria root rot

Ceratobasidiales

Ceratobasidiaceae

Ceratobasidium stevensii thread blight

Ganodermatales

Ganodermataceae

Ganoderma lucidum wood rot

Hymenochaetales

Hymenochaetaceae

Phellinus pomaceus white heart rot

Lachnocladiales

Lachnocladiaceae

Scytinostroma galactinum white root rot

**Polyporales** 

Corticiaceae

Corticium koleroga thread blight

Cyphellaceae

Maireina marginata wood decay

Meripilaceae

Phlebia radiatawood decayTrametes ochraceawood decay

**Poriales** 

Coriolaceae

Ceriporia spissa wood rot Coriolopsis gallica white rot Fomes fomentarius wood decay Fomitopsis pinicola brown cubical rot Laetiporus sulphureus (anamorph Sporotrichum versisporum) brown cubical rot Lenzites betulina wood decay Oxyporus latemarginatus wood decay wood decay Oxyporus similis

**Stereales** 

Atheliaceae

Butlerelfia eustacei storage rot

Sistotremataceae

Phymatotrichopsis omnivorum Texas root rot

**Basidiomycota: Urediniomycetes** 

**Uredinales** 

#### Pucciniaceae

Gymnosporangium clavipes quince rust

Gymnosporangium cornutum rust

Gymnosporangium fuscum
European pear rust
Gymnosporangium globosum
American hawthorn rust

Gymnosporangium hemisphaericum rust

Gymnosporangium libocedriPacific Coast pear rustGymnosporangium nelsoniiRocky Mountain pear rust

Gymnosporangium nidus-avis rust

Gymnosporangium nootkatense yellow cypress rust

Gymnosporangium shiraianum rust

Gymnosporangium spp. cedar apple rust

Gymnosporangium tremelloidescommon juniper gall rustGymnosporangium yamadaeJapanese apple rustGymnosporangium juniperi-virginianaecedar apple rust

**Unknown Uredinales** 

Roestelia fenzeliana rust Roestelia levis rust

**Basidiomycota: Ustomycetes** 

**Platygloeales** 

Platygloeaceae

Helicobasidium mompa violet root rot

Mitosporic Fungi (Coelomycetes)

**Sphaeropsidales** 

Sphaerioidaceae

Cytospora schulzeribark diseaseDothiorella malifruit rotPhomopsis truncicolablightPhyllosticta solitariaapple blotchPhyllosticta spp.leaf spotPyrenochaeta malifruit rot

Sphaeropsis pyriputrescens Sphaeropsis rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales

Dematiaceae

Alternaria mali alternaria blotch

Alternaria spp.

Helminthosporium papulosumblack poxCladosporium spp.mouldy coreEpicoccum spp.mouldy core

Stemphylium spp.

Ulocladium spp. cladosporium rot

Moniliaceae

Aspergillus spp. coloured moulds

Botrytis mali fruit rot Cephalosporium carpogenum fruit rot

Cephalosporium spp.

Penicillium spp. rot

Ramularia macrospora bellflower leaf spot Verticillium spp. verticillium wilt

**Tuberculariales** 

Tuberculariaceae

#### Fusarium spp.

#### **Unknown Hyphomycetes**

-

Oidium spp. powdery mildew

Oomycota: Oomycete Peronosporales

Peronosporaceae

Phytophthora capsici fruit rot of peppers
Phytophthora palmivora black rot

**Bacterium** 

**Schizomycetes** 

Pse domonadales

Pseudomonadaceae

Pseudomonas syringae pv. papulans blister spot

Virus

Cherry rasp leaf virus

+ Tomato bushy stunt virus

Tomato ringspot virus

Viroid

Apple dimple fruit viroid Apple fruit crinkle viroid Apple scar skin viroid

Phytoplasma

*Candidatus* Phytoplasma asteris' Apple sessile leaf phytoplasma

'Candidatus Phytoplasma mali' Apple proliferation phytoplasma

Disease of unknown 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

Ministry for Primary Industries Import Health Standard 155.02.06: Importation of Nursery Stock

## Inspection, Testing and Treatment Requirements for Malus

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. Growin 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 <b>AND</b> PCR		
Viruses			
Cherry rasp leaf virus	Herbaceous indexing (Chenopodium quinoa and Chenopodium amaranticolor) AND PCR		
Tomato bushy stunt virus	Herbaceous indexing (Chenopodium quinoa and Chenopodium amaranticolor)		
Tomato ringspot virus	Herbaceous indexing (Chenopodium quinoa and Chenopodium amaranticolor) AND ELISA or PCR		
Viroids			
Apple dimple fruit viroid	PCR		
Apple fruit crinkle viroid	PCR		
Apple scar skin viroid	PCR		
Phytoplasmas			
'Candidatus Phytoplasma asteris' (Apple sessile leaf phytoplasma)	Nested PCR or real time PCR using universal phytoplasma primers		
'Candidatus Phytoplasma mali' (Apple proliferation phytoplasma)	Nested PCR or real time PCR using universal phytoplasma primers		
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	Growing season inspection		
Apple junction necrotic pitting agent	Growing season inspection		
Apple McIntosh depression agent	Growing season inspection		

Apple narrow leaf agent	Growing season inspection
Apple Newton wrinkle agent	Growing season inspection
Apple pustule canker agent	Growing season inspection
Apple red ring agent	Growing season inspection
Apple rosette agent	Growing season inspection
Apple rough skin agent	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

#### 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 **unit for testing** is definied in section 2.3.2.1.
- **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 postinoculated 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-environmentlaboratory/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* 

*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 Plants

PEQ: Level 2

Minimum Period: 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13) **Note**: Only applies to the following species: *Mangifera indica* c. 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

*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 *Callistemon*, *Leptospermum*, *Metrosideros*, *Myrtus* and *Psidium* 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)

Additional Declaration: "Puccinic	a psidii s.l. complex (including Uredo rangelii) is not
known to occur in	[the country of origin]".
OPTION 2:	
PEQ: Level 3B	
<b>Minimum Period</b> : 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 Callistemon, Leptospermum, Metrosideros, Myrtus and Psidium genera

#### **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 *Callistemon, Leptospermum, Metrosideros, Myrtus* and *Psidium* genera
- 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

*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.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

## 4. Entry conditions:

## (i) Documentation

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

Import permit: an import permit is required.

### (ii) *Phytosanitary requirements*

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

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

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

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

#### **AND**

- derived from explant material which has been 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) <u>Post-entry quarantine</u>

PEO: 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 Bacterial leaf blight

Leifsonia xyli subsp. Xyli Sugarcane ratoon stunting disease

## Fungi

Acremonium sp. Black bundle disease

Colletotrichum sp. Leaf spot Canker Diaporthe sp. Diplodia sp. Blight Drechslera gigantean Eyespot Fusarium miscanthi Rot Fusarium pallidoroseum Rot Glomerella sp. Leaf spot Glomerella tucumanensis Leaf spot Eyespot Helminthosporium sp. Leptosphaeria sp. Canker Magnaporthe salvinii Stem rot Mycosphaerella recutita Leaf blight Mycosphaerella striatiformans Leaf spot Nigrospora sp. Stalk rot Passalora koepkei Yellow spot Downy mildew Peronosclerospora sp.

Phlyctema sp. Canker Phoma sp. Blight Blight Phomopsis sp. Phyllachora sp. Leaf spot Puccinia melanocephala Sugarcane rust Ramularia sp. Anthracnose Rhizoctonia sp. Root rot Stagonospora sp. Scorch Thanatephorus cucumeris Blight

Ustilago scitamineaSugarcane smutVerticillium sp.Verticillium wilt

#### Mites

Schizotetranychus celarius Bamboo mite

#### Viruses

## 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.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

6. Other internationally recognised testing methods: May be accepted by MPI with prior notification.

Musa

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

## **GENERAL CONDITIONS:**

#### **Guidance:**

Importers wanting to import eligible species under this schedule should contact MPI at
 Plant.Imports@mpi.govt.nz well in advance of their intended import to discuss their importation
 plans. This is because MPI will need to undertake a risk assessment that could lead to changes in
 import requirements which may lead to longer timeframes for issuing permits.

**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**

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

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

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

## **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

## A. For Whole Plants

**PEO:** 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)
- c. Conditions for *Alternanthera mosaic virus* and *Plantago asiatica mosaic virus*Additional Declaration: "*Alternanthera mosaic virus* and *Plantago asiatica mosaic virus* are not known to occur in \_\_\_\_\_\_[the country or state where the plants were grown]".

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

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*".

Narcissus

*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

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

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.

#### ΔND

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:**

PEO: 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

**Note:** The entry conditions in 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) Phytosanitary requirements

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

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

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

#### **AND**

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

#### **AND**

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

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

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section [cuttings only]

(iv) <u>Special tissue culture media requirements</u> 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)**

Insecta

Insecta

Coccidae

Saissetia privigna black scale

Coleoptera

Attelabidae

Rhynchites cribripennis twig cutter

Buprestidae

Anthaxia ariadna wood-boring beetle

Scolvtidae

Hylesinus fraxinibark beetleHylesinus oleiperdabark beetleHylesinus toraniobark beetlePhloeotribus oleaebark beetlePhloeotribus scarabaeiodesbark beetleXylosandrus compactusblack twig borer

**Diptera** 

Cecidomyiidae

Thomasiniana sp. olive bark midge

Asterolecaniidae

Pollinia pollini globe shaped olive scale

Coccidae

Ceroplastes rusci fig wax scale

Lichtensia viburniscaleMetaceronema japonicascale insect

Diaspididae

Aonidomytilus espinosaiscaleHemiberlesia palmaepalm scaleLeucaspis riccaescaleLindingaspis ferrisiscaleParlatoria oleaeolive scalePseudaulacaspis pentagonawhite peach scale

Selenaspidus articulatus **Lepidoptera** 

Pyralidae

Euzophera pinguis bark borer

Mite

Arachnida

Acarina

Eriophyidae

Aceria cretica mite
Aceria oleae olive mite

Aculops benakii olive yellow spot mite

Aculus oleariusolive miteDitrymacus athiasellusolive miteEriophyes oleaeolive bud miteEriophyes oliviolive mite

Oxycenus maxwelli olive leaf and flower mite Oxycenus niloticus olive leaf and flower mite

West Indian red scale

Oxycenus noloticus olive leaf and flower mite

Tegonotus hassani olive rust mite

Tenuipalpidae

Brevipalpus chalkidicus false spider mite

Brevipalpus macedonicusfalse spider miteBrevipalpus oleaefalse spider miteBrevipalpus oleariusfalse spider miteBrevipalpus olivicolafalse spider miteRaoiella macfarlaneifalse spider miteTenuipalpus caudatusfalse spider mite

Tetranychidae

Eotetranychus lewisi big beaked plum mite

**Fungus** 

Ascomycota

**Dothideales** 

Capnodiaceae

Capnodium elaeophilum sooty mould

Elsinoaceae

Elsinoe oleae olive scab

**Unknown Dothideales** 

Massariella oleaebark cankerMassariella zambettakianacankerZukalia purpureablack mildew

Xylariaceae

Xylaria sicula root rot

Basidiomycota Agaricales

Agaricaceae

Armillaria mellea (anamorph Rhizomorpha subcorticalis) armillaria root rot

**Boletales** 

Paxillaceae

Omphalotus olearius wood rot

Ganodermatales

Ganodermataceae

Ganoderma lucidum (anamorph Polyporus lucidus) wood rot

Hymenochaetales

Hymenochaetaceae

Phellinus igniarius wood rot

Oomycota

Peronosporales

Peronosporaceae

Phytophthora palmivora Coconut budrot

Phytophthora ramorum Sudden oak death disease

**Poriales** 

Coriolaceae

Fomes fomentarius Fomes fulvus Fomes salicinus

Ministry for Primary Industries Import Health Standard 155.02.06: Importation of Nursery Stock

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** 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 leaf spot Septoria oleagina Septoria serpentaria leaf spot Sphaeropsis dalmatica stem gall Sphaeropsis oleae stem gall **Unknown Coelomycetes Unknown Coelomycetes** Cylindrosporium olivae leaf spot **Bacterium** Pseudomonadaceae Pseudomonas syringae pv. garcae twig blight Xylella fastidiosa Virus Cherry leaf roll virus [strains not in New Zealand] Olive latent 1 virus Olive latent 2 virus Olive latent ringspot virus Olive leaf yellowing-associated virus Olive vein yellow virus Strawberry latent ringspot virus [strains not in New Zealand] Phytoplasma Olive witches' broom phytoplasma Disease of unknown aetiology Infectious yellows

Leaf malformation Olive sickle leaf disease Olive yellow mosaic disease Olive yellow mottling and decline

Partial paralysis

## Inspection, Testing and Treatment Requirements for Olea

ORGANISM TYPES	MPI ACCEPTED METHODS (See notes below)
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 <b>AND</b> PCR
Viruses	
Cherry leaf roll virus [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators Ca, Cq and Nb.
Olive latent 1 virus	Herbaceous indicators Ca, Cq and Nb.
Olive latent 2 virus	Herbaceous indicators Ca, Cq and Nb.
Olive latent ringspot virus	Herbaceous indicators Ca and Cq.
Olive leaf yellowing-associated virus	Woody indicators (Olea europaea cv. Biancolilla)
Olive vein yellow virus	Herbaceous indicators Cq
Strawberry latent ringspot virus [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators Ca and Cq.
Phytoplasmas	Woody indicators <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.

#### Note:

## Paeonia (herbaceous species)

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)

Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Paeonia* (tree species)", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries**: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America

**Quarantine Pests**: Cronartium flaccidum

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

#### A. For Whole Plants

PEQ: Level 1

**Minimum Period**: 3 months

**Isolation:** open ground - 400m from any *Pinus* tree

- 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) Aditional Declaration: "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

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

**Paulownia** 

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

PEO: Level 2

Minimum Period: 3 months

- . Conditions for Witches broom phytoplasma

  Additional Declaration: "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".

Persea

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) <u>Documentation</u>

**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** 

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity

- 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 beetle

Monolepta australis red-shouldered leaf beetle

Curculionidae

Copturus aguacatae branch boring weevil

Diaprepes abbreviatus citrus weevil

Heilipus squamosus -

Naupactus xanthographus fruit tree weevil

Hemiptera

Coreidae

Amblypelta lutescensbanana spotting bugAmblypelta nitidafruit-spotting bug

Pseudotheraptus wayi coreid bug

Lygaeidae

Nysius ericae false chinch bug

Tingidae

Pseudacysta perseae avocado lace bug

Homoptera Aleyrodidae

Aleurocanthus woglumi citrus blackfly

Parabemisia myricae Japanese bayberry whitefly

Paraleyrodes minei whitefly

Paraleyrodes perseae plumeria whitefly

Tetraleurodes perseae whitefly

Trialeurodes floridensis avocado whitefly

Coccidae

Ceroplastes floridensisFlorida wax scaleCeroplastes rubensred wax scaleCeroplastes ruscifig wax scaleChloropulvinaria psidiiguava scaleProtopulvinaria pyriformispyriform scale

Pulvinaria mammeae -

Diaspididae

Aonidiella orientalisoriental yellow scaleAspidiotus destructorcoconut scaleChrysomphalus aonidumFlorida red scaleChrysomphalus dictyospermidictyospermum scale

Fiorinia fioriniae fiorinia scale
Pinnaspis strachani hibiscus snow scale
Selenaspidus articulatus West Indian red scale

Margarodidae

Icerya seychellarum Seychelles scale

Pseudococcidae

Dysmicoccus brevipespineapple mealybugFerrisia virgatastriped mealybugNipaecoccus nipaecoconut mealybugPlanococcus citricitrus mealybug

Psyllidae

psyllid Trioza aguacate Trioza anceps psyllid psyllid Trioza godoyae Trioza perseae psyllid

Hymenoptera Formicidae

> leaf-cutting ant Atta cephalotes

Lepidoptera

Geometridae

Ascotis selenaria mugwort looper Sabulodes aegrotata omnivorous looper

Hesperiidae

Pyrrhopyge chalybea swift moth

Noctuidae

Peridroma margaritosa Prodenia eridania

Pseudoplusia includens soybean looper

Oecophoridae

Stenoma catenifer stenomid moth

Pyralidae

Cryptoblabes gnidiella Christmas berry webworm

Stericta albifasciata

Tortricidae

leafroller Amorbia cuneana

Mexican leafroller Amorbia emigratella

leafroller Amorbia essigana Argyrotaenia citrana orange tortrix carnation leafroller Cacoecimorpha pronubana Cryptophlebia leucotreta false codling moth Homona spargotis avocado leafroller orange fruitborer Isotenes miserana Platynota stultana omnivorous leafroller

**Thysanoptera** 

**Thripidae** 

Retithrips syriacus black vine thrips Selenothrips rubrocinctus red-banded thrips

Mite

Arachnida

Acarina

Tetranychidae

Oligonychus coffeae tea red spider mite

Oligonychus perseae spider mite Oligonychus punicae

avocado brown mite Oligonychus yothersi avocado red mite

**Fungus** 

Ascomycota

**Phyllachorales** 

Phyllachoraceae

Glomerella cingulata var. minor (anamorph anthracnose

Colletotrichum gloeosporioides var. minus)

**Xylariales** 

**Xylariaceae** 

Rosellinia bunodes

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Rosellinia pepo

Basidiomycota

Hymenochaetales

Hymenochaetaceae

Phellinus noxius brown root rot

Oomycota Pythiales Pythiaceae

Phytophthora palmivora

black rot

Dothideomycetes Myriangiales Elsinoeaceae

Sphaceloma perseae Avocado scab

mitosporic fungi (Coelomycetes)

Sphaeropsidales Sphaerioidaceae

Phomopsis perseae fruit rot

mitosporic fungi (Hyphomycetes)

Hyphomycetales Dematiaceae

Pseudocercospora purpurea cercospora spot blotch unknown

Hyphomycetes unknown Hyphomycetes

Stilbella cinnabarina

**Bacteria** 

Pseudomonadaceae

Xylella fastidiosa Pierce's disease

Virus

Avocado cryptic virus 3

Viroid

Avocado sunblotch viroid [strains not in New Zealand] - Potato spindle tuber viroid -

Disease of unknown aetiology

Avocado black streak

# Inspection, Testing and Treatment Requirements for Persea

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)	
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 <b>AND</b> 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 <b>or</b> PAGE <b>or</b> 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.

# Petunia

**Note:** The entry conditions in 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 PEQ: 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 <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 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 <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.

### 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

ii. 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 <a href="http://mpi.govt.nz/importing/plants/seeds-for-sowing/genetically-modifiedseeds/">http://mpi.govt.nz/importing/plants/seeds-for-sowing/genetically-modifiedseeds/</a>

# 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
Tomato chlorotic dwarf 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* 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 - <a href="https://www.biosecurity.govt.nz/dmsdocument/1152-NurseryStock-Import-Health-Standard">https://www.biosecurity.govt.nz/dmsdocument/1152-NurseryStock-Import-Health-Standard</a>,

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,	I, ( <b>Importer</b> '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 - <a href="https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard">https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard</a>,

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.

**Phalaenopsis** 

**Note:** The entry conditions in 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, Orchid fleck dichorhavirus, 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 Orchid fleck dichorohavirus

Growing season inspection in post-entry quarantine for symptom expression.

### **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 Whole Plants in growing media from Taiwan

No import permit is required

PEQ: None

**Specific Requirements:** Sections 2.2.1.6 and 2.2.1.9 of the Basic Conditions are not required. **Additional Declarations:** 

#### 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.

# Philodendron

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

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

A. For Cuttings and Whole Plants

**PEO:** 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 Cuttings

PEO: Level 2

**Minimum Period**: 3 months

Height 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

  Additional Declaration: "Cadang cadang and lethal yellowing are not known to occur in

  [the country or state where the plants were grown]".

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

## **GENERAL CONDITIONS:**

**Approved Countries**: All

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

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

#### A. For Whole Plants

PEQ: Level 2

**Minimum Period:** 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Guidance for importers**: The minimum quarantine period will be <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:

l)	"Gymnosporangium s	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 greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

Note:

Planera

The entry conditions in 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

**PEO**: Level 3B

Minimum Period: 3 months

**Platanus** 

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

**Note:** The entry conditions in 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 not 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) Additional Declaration: "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 greenhouse</u>, for tissue cultures from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*.

**Polyscias** 

*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**

### Guidance:

Poncirus nursery stock (plants for planting) is no longer eligible for import under this schedule.

Import requirements for *Poncirus* plants for planting are now set out in: Import Health Standard: *Citrus* Plants for Planting, available on the plant imports website at:

https://www.mpi.govt.nz/import/plantsflowers-seeds-plant-growing-products/nursery-stock/requirement-documents-for-importing-nurserystock/

*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 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- d. Conditions for *Phellinus noxius* (section 2.2.1.13)

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

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 greenhouse</u>, 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:

**Prunus** 

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:

https://www.biosecurity.govt.nz/dmsdocument/39488-Prunus-Plants-for-Planting-Import-HealthStandard

*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 Plants

PEQ: Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for Xylella fastidiosa (section 2.2.1.12)

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

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 greenhouse</u>, 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 Communis

Cuttings (dormant)

Pyrus Communis

Pyrus Communis

Pyrus Communis

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

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 greenhouse</u>, 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.

Ranunculus

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Ranunculus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard. These conditions do not apply to *Ranunculus arvensis*, *Ranunculus repens* and *Ranunculus sardous*, for which there is currently no import health standard.

## **GENERAL CONDITIONS:**

**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:**

**PEO:** 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

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

c. Conditions for Phymatotrichopsis omnivora

#### **OPTION 1**

i) <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:**

**PEO:** 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 greenhouse</u>, 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	Commodity Sub-class	<b>Date Issued</b>	
Ribes nigrum	Whole Plants	19 June 1998	
Ribes uva-crispa	Whole Plants	19 June 1998	

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

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

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

# 2. Quarantine pests

Fungi	Phellinus noxius, Pucciniales	
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	'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

PEO: 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) Additional Declaration: "[Virus name] is absent/not known to occur in \_\_\_\_\_ [name of country]"

OR

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

### **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) Additional Declaration: "[Virus name] is absent/not known to occur in \_\_\_\_\_ [name of country]".

#### OR

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

PEO: 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

**PEO:** 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*.

**PEO:** 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) 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".
- 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) Additional Declaration: "[Virus name] is absent/not known to occur in \_\_\_\_\_ [name of country]".

### OR

- ii) Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for *Rosa*".
- d. Conditions for *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	Phellinus noxius Refer to section 2.2.1.13 "Measures for Phellinus noxius"		
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 Growing season inspection in PEQ symptom expression AND plating selective media OR 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 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.

Rubus

Note: The entry conditions in 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) *Phytosanitary requirements*

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

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

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

#### **AND**

- treated for regulated insects and mites as described in 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) <u>Post-entry quarantine</u>

**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 postentry 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) Phytosanitary requirements

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

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

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

#### **AND**

- treated for regulated insects and mites as described in 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)**

Insects
Incacto

#### Coleoptera

Attelabidae

Rhynchites germanicus strawberry rhynchites

Buprestidae

Agrilus aurichalceusraspberry buprestidAgrilus rubicolaraspberry buprestidAgrilus ruficollisred-necked cane borer

Byturidae

Byturus ochraceus raspberry beetle

Byturus rubi eastern raspberry fruitworm

Byturus tomentosusraspberry beetleByturus unicolorraspberry fruitwormByturus urbanusraspberry beetle

Cerambycidae

Coreus marginatus longhorn beetle
Oberea bimaculata raspberry caneborer

Chrysomelidae

Batophila aerataraspberry flea beetleBatophila rubiraspberry flea beetle

Brachypnoea exilis grita flea beetle
Nodonota margaretae leaf beetle

Curculionidae

Anthonomus rubiapple blossom weevilAnthonomus signatusblossom weevilMerhynchites bicolorrose curculioMerhynchites wickhamicurculio

Nemocestes incomptusstrawberry root weevilOtiorhynchus clavipesred-legged weevilOtiorhynchus singularisclay covered weevilRhynchaenus fagistrawberry weevil

Scleropterus verecundus weevil

Nitidulidae

Meligethes hebes sap beetle

Scarabaeidae

Cetonia aurata pisanascarabaeid beetleCotinis nitidagreen June beetleMacrodactylus subspinosusrose chaferPhyllopertha horticolagarden chaferPopillia japonicaJapanese beetle

Diptera

Agromyzidae

Agromyza spiraeae rose leafminer

Anthomyiidae

Pegomya rubivora raspberry cane maggot

Cecidomyiidae

Contarinia agrimoniae midge

Contarinia rubicola blackberry flower midge

Dasineura plicatrix blackberry leaf midge Lasioptera rubi raspberry gall midge

Resseliella theobaldi raspberry midge

Hemiptera

Anthocoridae

Orius vicinus raspberry bug

Miridae

Lygocoris pabulinus common green caspid Lygus lineolaris carnished plant bug

Macrolophus rubi mirid
Psallus variabilis mirid

Pentatomidae

Dolycoris baccarumstink bugPentatoma rufipesforest bug

Homoptera

Aetalionidae

Aetalion reticulatum -

Aphididae

Amphorophora agathonica strawberry aphid
Amphorophora idaei large raspberry aphid

Amphorophora rubitoxica aphid

Aphis rubicola [vect.] raspberry aphid

Aphis ruborum permanent blackberry aphid

Macrosiphum funestumrose aphidMatsumuraja hirakurensisraspberry aphid

Cicadellidae

Dikrella californica blueberry leafhopper

Dikrella cruentataleafhopperEdwardsiana rosaerose leafhopperErythroneura rubiphyllaleafhopperMacropsis fulcatusleafhopper

Macropsis fuscula boysenberry leafhopper

Metascarta impressifronsleafhopperTyphlocyba spp.rubus leafhoppers

lssidae

Mycterodus serbicus plant bug

Psyllidae

Trioza tripunctata blackberry psyllid

Trioza trisignata psyllid

Hymenoptera

Cephidae

Hartigia albomaculata sawfly borer

Cynipidae

Diastrophus spp. stem gall cynipids

Pamphilidae

Pamphilius sitkensis sawfly

Pergidae

Philomastix macleaii bramble sawfly

Tenthredinidae

Allantus cinctus banded rose sawfly

Emphytus calceatus sawfly

Empria tridens raspberry sawfly

Metallus pumilusraspberry leaf-mining sawflyMetallus rohweriraspberry leafmining sawflies

Metallus rubiblackberry leafminerMonophadnoides geniculatusraspberry sawfly

Perineura rubi sawfly Sterictiphora furcata sawfly

Lepidoptera

Geometridae

Itame wauaria v-moth

Operophtera bruceataBruce spanwormOperophtera brumataEuropean winter moth

Hepialidae

Hepialus humuli ghost swift moth

Incurvariidae

Lampronia rubiella raspberry bud moth

Lymantriidae

Euproctis chrysorrhoeabrown-tail mothLymantria disparAsian gypsy mothOrgyia antiquarusty tussock moth

Megalopygidae

Megalopyge lanata -

Nepticulidae

Stigmella aurella -Stigmella splendidissimella -

Noctuidae

Acronicta psigrey dagger mothAgrotis segetumturnip mothCosmia trapezinadun-bar moth

Eudocima tyrannusAkebia leaf-like mothGraphiphora augurdouble dart moth

Melanchra persicariae dot moth

Oraesia emarginata fruit-piercing moth

Papaipema nebris stalk borer

Peridroma sauciavariegated cutwormSpirama retortafruit sucking mothXestia c-nigrumspotted cutworm

Notodontidae

Phalera bucephala buff-tip moth

Saturniidae

Saturnia pavonia silk moth

Sesiidae

Pennisetia hylaeiformisraspberry crownborerPennisetia marginataraspberry crownborerSynanthedon bibionipennisstrawberry crown moth

Tortricidae

Acleris comariana leafroller

Acleris laterana broad barred button moth

Archips oporanusfruit tree tortixArgyrotaenia citranaorange tortix

Choristoneura rosaceanaobliquebanded leafrollerCnephasia longanaomnivorous leaftierEpiblema uddmannianabramble shoot borer

Olethreutes concinnanaleafrollerOlethreutes furfuranumleafrollerPandemis cerasanaleafroller

Spilonota ocellana eye-spotted bud moth

#### **Orthoptera**

Gryllidae

Oecanthus nigricornisblackhorned tree cricketOecanthus pellucensblackhorned tree cricket

Phasmida

Phasmatidae

Carausius morosus wingless stick insect

Thysanoptera Thripidae

Thrips flavus flower thrips

Mites

Arachnida

Acarina

Eriophyidae

Cenopalpus pseudospinosusrust miteEpitrimerus gibbosuseriophyid miteEriophyes rubieriophyid 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 bakeridagger nematodeXiphinema barensedagger nematode

Secernentea

**Tvlenchida** 

Criconematidae

Criconemella axestis -

Criconemella curvata ring nematode

Criconemella denoudeni -

Criconemella ornataring nematodeCriconemella sphaerocephalaring nematodeCriconemella xenoplaxring nematode

Dolichodoridae

Tylenchorhynchus claytoni tobacco stunt nematode

Hoplolaimidae

Helicotylenchus platyurus -

Hoplolaimus magnistylus - Scutellonema bradys yam nematode

Pratylenchidae

Hirschmanniella oryzae rice root nematode

**Fungi** 

**Ascomycota: Ascomycetes** 

Diaporthales Valsaceae

Gnomonia rostellata -

Gnomonia rubi (anamorph Gloeosporium sp.) cane canker, dieback

Gnomonia setacea cane canker, dieback **Dothideales** Leptosphaeriaceae Leptosphaeria thomasiana cane blight Melanconidaceae Sydowiella depressula Mycosphaerellaceae Mycosphaerella confusa (anamorph Pseudocercospora rubi) cercospora leaf spot Mycosphaerella ligea cane & leaf spot Mycosphaerella rubi (anamorph Septoria rubi) cane & leaf spot Sphaerulina rubi (anamorph Cylindrosporium rubi) Helotiales Dermateaceae Pyrenopeziza rubi cane spot Sclerotiniaceae Monilinia fructigena (anamorph Monilia fructigena) brown rot Meliolales Meliolaceae Appendiculella calstroma black mildew Unknown Ascomvcetes Hormotheca rubicola - Basidiomycota: Basidiomycetes **Agaricales** Tricholomataceae Armillaria gallica armillaria root rot Armillaria mellea (anamorph Rhizomorpha subcorticalis) shoestring root rot Armillaria ostoyae armillaria root rot Russulales Lachnocladiaceae Scytinostroma galactinum Scytinostroma galactinum **Unknown Basidiomycetes** Gerwasia epiphylla **Basidiomycota: Urediniomycetes Stereales** Sistotremataceae Phymatotrichopsis omnivora Texas root rot **Uredinales** Phragmidiaceae Arthuriomyces peckianus orange rust Gymnoconia nitens rust Hamaspora longissima sub-tropical rust Phragmidium alaskanum - Phragmidium bulbosum rust Phragmidium occidentale Pucciniastraceae Pucciniastrum americanum late leaf rust Pucciniastrum arcticum Mitosporic Fungi (Coelomycetes) anther blight Hapalosphaeria deformans Macrophoma rubi leaf scorch Marssonina potentillae Phyllosticta carpogena Mitosporic Fungi (Hyphomycetes) Fusicladium grayianum Passalora monrosii

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**Zygomycota: Zygomycetes** 

Pseudocercospora heteromalla Pseudocercospora rubicola

Verticillium albo-atrum [severe strain]

verticillium wilt

# Mucoraceae Rhizopus sexualis soft rot Chromista Oomvcota **Pythiaceae** Phytophthora idaei Phytophthora ramorum sudden oak death Phytophthora rubi root rot **Bacteria** Enterobacteriaceae Erwinia amylovora f.sp. rubi Rhizobiaceae Agrobacterium rubi cane gall Xanthomonadaceae Pierce's disease Xylella fastidiosa Viruses Black raspberry necrosis virus [strains not in New Zealand] Blackberry calico virus Blackberry chlorotic ringspot virus Blackberry virus Y Blackberry yellow vein associated virus Bramble yellow mosaic virus Cherry rasp leaf virus Hawaiian rubus leaf curl virus Raspberry latent virus Raspberry leaf curl virus Raspberry ringspot virus Rubus Chinese seedborne virus Rubus chlorotic mottle virus Rubus yellow net virus Thimbleberry ringspot virus Tobacco necrosis virus [strains not in New Zealand] Tomato ringspot virus Wineberry latent virus **Phytoplasmas** Black raspberry witches'-broom phytoplasma Rubus stunt phytoplasma

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Disease of unknown aetiology

Mucorales

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 not in New Zealand]	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i> <b>and</b> 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> ) <b>and</b> ELISA <b>or</b> 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 (Chenopodium quinoa)	
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>	
Tobacco necrosis virus [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> ) <b>and</b> ELISA <b>or</b> 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.
- **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 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. Postinoculated 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 greenhouse</u>, 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.

Sandersonia

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

# 1. Type of Sandersonia nursery stock approved for entry into New Zealand Dormant bulbs

#### Plants in tissue culture

2. Pests of Sandersonia Refer to the pest list.

#### 3. Entry conditions for:

# 3.1 Sandersonia dormant bulbs from any country

#### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required. **Import permit:** no import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry 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) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The Sandersonia plants in tissue culture have been:

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

(iv) <u>Additional declarations to the phytosanitary certificate</u> 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 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> undulata, <i>Gloxinia</i> gymnostoma and Nematanthus wettsteinii 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
Tomato chlorotic dwarf viroid	PCR based methods	Only applies to  Calibrachoa 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.

**Note:** The entry conditions in 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) $\underline{Documentation}$

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) <u>Inspection, testing and treatments of the consignment</u>

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

Fungi

Chytridiomycota

Chytridiales

Synchytriaceae

Synchytrium endobioticum [official control] potato wart

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales Sphaerioidaceae

Phoma andigena var. andina phoma leaf spot

Mitosporic Fungi

Unknown Mitosporic Fungi Unknown Mitosporic Fungi

Aecidium cantensis deforming rust

Oomycota

Peronosporales

Peronosporaceae

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 R. solanacearum race 1)

Corynebacteriaceae

Clavibacter michiganensis subsp. sepedonicus potato ring rot

Enterobacteriaceae

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)
Dickeya solani

Pectobacterium betavasculorum bacterial sudden yellows death

(syn. Erwinia carotovora subsp. betavasculorum)

Pectobacterium polaris

Pseudomonadaceae

Xylella fastidiosa Phyllobacteriaceae

'Candidatus Liberibacter solanacearum' haplotype B

Viroids

Columnea latent viroid\*

Pepper chat fruit viroid\*

Potato spindle tuber viroid [transient]

Tomato chlorotic dwarf viroid\*

Tomato planta macho viroid\*

#### Viruses

Abutilon mosaic begomovirus\* Andean potato latent tymovirus Andean potato mild mosaic tymovirus Andean potato mottle comovirus Arracacha A nepovirus\* Arracacha B nepovirus Asparagus 3 potexvirus\* Beet curly top curtovirus Cassava green mottle nepovirus\* Cassia mild mosaic carlavirus\* Cherry leaf roll nepovirus\* Eggplant mosaic tymovirus\* Eggplant mottled dwarf nucleorhabdovirus Henbane mosaic potyvirus\* Melilotus mosaic potyvirus\* Papaya mosaic potexvirus Pelargonium line pattern carmovirus\* Pepino mosaic potexvirus Pepper veinal mottle potyvirus\* Potato 14R tobamovirus Potato black ringspot nepovirus Potato deforming mosaic begomovirus Potato latent carlavirus Potato mop-top furovirus Potato P carlavirus Potato rough dwarf carlavirus Potato virus 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 ilarvirus Solanum apical leaf curling begomovirus Solanum yellows luteovirus Southern potato latent carlavirus Sowbane mosaic sobemovirus Tobacco etch potyvirus\* Tobacco necrosis necrovirus [strains not in New Zealand] Tobacco necrotic dwarf luteovirus\* Tobacco rattle tobravirus [strains not in New Zealand] Tobacco streak ilarvirus [strains not in New Zealand] Tobacco stunt varicosavirus\* Tomato bushy stunt tombusvirus\* Tomato infectious chlorosis crinivirus Tomato leaf curl begomovirus - Australia\* Tomato leaf curl begomovirus - New Delhi Tomato top necrosis nepovirus\* Tomato yellow leaf curl begomovirus

Tomato yellow mosaic begomovirus\*

Tomato yellow vein streak begomovirus\*

Wild potato mosaic potyvirus

#### **Phytoplasmas**

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		
Aecidium cantensis	Growing season inspection in PEQ for symptom expression	
Phoma andigena var. andina	Growing season inspection in PEQ for symptom expression	
Synchytrium endobioticum [official control]	Growing season inspection in PEQ for symptom expression	S. endobioticum cannot be cultured. It is identified by microscopic examination of affected plants. This organism belongs to the Myxomycetes in the Kingdom Protozoa.
Oomycetes		
Phytophthora capsici	Growing season inspection in PEQ for symptom expression	
Phytophthora infestans (A2 mating strain)	Growing season inspection in PEQ for symptom expression	
Phytophthora palmivora	Growing season inspection in PEQ for symptom expression	
Bacteria		
'Candidatus Liberibacter	Growing season inspection in PEQ for	
solanacearum' haplotype B	symptom expression AND PCR	
Clavibacter michiganensis subsp. sepedonicus	Growing season inspection in PEQ for symptom expression AND  Immunofluorescence or  ELISA AND grow plantlets on Murashige and Skoog medium or  PCR AND grow plantlets on Murashige and Skoog medium	
Dickeya chrysanthemi pv. chrysanthemi	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
Dickeya chrysanthemi pv. parthenii	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
Dickeya paradisiaca	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
Dickeya solani	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
Pectobacterium betavasculorum	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
Pectobacterium polaris	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	

	Ralstonia pseudosolanacearum formerly R. solanacearum race	Growing season inspection in PEQ for symptom expression, AND plating on selective media OR PCR	
y	Xylella fastidiosa	Growing season inspection in PEQ for symptom expression <b>AND</b> PCR	

ORGANISM TYPES	MPI-ACCEPTED METHODS	Comments
Viroids		
Potato spindle tuber viroid [transient]	PCR using two sets of primers or Return PAGE (with silver staining) or Hybridisation (P32 or digoxigenin labelled RNA probes)	
Viruses		
Arracacha B nepovirus	ELISA or PCR AND herbaceous indicators Ca	Sap transmitted with difficulty. ELISA must detect the oca strain
Andean potato latent tymovirus	ELISA or PCR AND herbaceous indicators Nb, No	
Andean potato mild mosaic tymovirus	ELISA or PCR	
Andean potato mottle comovirus	ELISA or PCR AND herbaceous indicators Nc, Nd	
Beet curly top curtovirus	ELISA or PCR	
Eggplant mottled dwarf nucleorhabdovirus	Herbaceous indicators Nb, Nc, Nd	
Papaya mosaic potexvirus	PCR and Herbaceous indicator Ca	
Pepino mosaic virus	PCR and Herbaceous indicators Nd, No, and Nt	
Potato 14R tobamovirus	Growing season inspection in PEQ for symptom expression	Not fully characterised.
Potato black ringspot nepovirus	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Cq, No	
Potato deforming mosaic begomovirus	PCR or ELISA	
Potato latent carlavirus	PCR	
Potato mop-top furovirus	ELISA or PCR AND herbaceous indicators Ca, Cq, Nd	ELISA can be used to detect the virus in indicator plants but may not be reliable for potato in which virus is usually in low concentration or erratically distributed.
Potato P carlavirus	PCR	
Potato rough dwarf carlavirus	PCR	
Potato T trichovirus	ELISA or PCR AND Herbaceous indicators Ca, Cq	
Potato virus H carlavirus	PCR	
Potato virus U nepovirus	Herbaceous indicators Ca, Cq	
Potato virus V potyvirus	ELISA or PCR	
Potato virus Y potyvirus [strains not in NZ]	ELISA or PCR AND herbaceous indicators Nb, No	

D. 4.4	II. day a saladay N.	
Potato yellow dwarf	Herbaceous indicators Nc	
nucleorhabdovirus	***	
Potato yellow mosaic	Herbaceous indicators Nb, Nt	
begomovirus	DCD 1 1 1 1 1	
Potato yellow vein crinivirus	PCR or hybridisation	
Potato yellowing ilarvirus	ELISA or PCR	
Solanum apical leaf curling	Growing season inspection in PEQ for	
begomovirus	symptom expression	
Solanum yellows luteovirus	Growing season inspection in PEQ for symptom expression	
Southern potato latent carlavirus	Growing season inspection in PEQ for symptom expression	
Sowbane mosaic sobemovirus	Herbaceous indicators Ca, Cq	
Tobacco necrosis necrovirus	Herbaceous indicators Ca, Cq, Nc	Tobacco necrosis virus A
[strains not in New Zealand]	Tierbaccous mulcators ca, eq. ive	Tobacco necrosis virus B
ORGANISM TYPES	MPI-ACCEPTED METHODS	Comments
Tobacco rattle tobravirus [strains	PCR AND herbaceous indicators Ca, Nc	Serological detection is unreliable
not in New Zealand]	Tex Arth herbaccous mulcators ca, ive	because of diversity in the particle proteins of different isolates.
Tobacco streak ilarvirus [strains not in New Zealand]	Herbaceous indicators Nt	Potato strain SB10 infects potato naturally.
Tomato infectious chlorosis crinivirus	PCR	
Tomato leaf curl begomovirus – New Delhi	Herbaceous indicators Nb	Potato leaf curl is a new disease in northern India caused by a strain of Tomato leaf curl new Delhi virus.
Tomato yellow leaf curl begomovirus	PCR or ELISA	
Tomato yellow mosaic	PCR or ELISA AND herbaceous	
begomovirus	indicators Nb, Nt	
Wild potato mosaic potyvirus	Herbaceous indicators Nc, No	
Phytoplasmas		
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	
Potato purple-top roll	phytoplasma primers  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	
1 otato found teat phytopiasilla	phytoplasma primers	
Potato stolbur phytoplasma	Nested or real-time PCR using universal	

Potato witches' broom	Nested or real-time PCR using universal	
phytoplasma	phytoplasma primers	
Saq'O disease	Growing season inspection in PEQ for symptom expression	An unknown phytoplasma and a 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* experimentally. Tests that would detect these pathogens are already being conducted elsewhere in this schedule.

ORGANISM TYPES	Comments	
Columnea latent viroid*	No evidence that this viroid infects potato naturally.	
Pepper chat fruit viroid	No evidence that this viroid infects potato naturally.	

Tomato chlorotic dwarf viroid*	Tests that would detect this viroid are already being conducted elsewhere in this schedule e.g. the herbaceous indicator Nd.
Tomato planta macho viroid*	No evidence that this viroid infects potato naturally (Galindo <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 being conducted elsewhere in this schedule, e.g. the indicators Cq and Ca.
Tobacco necrotic dwarf luteovirus*	No appropriate test available.
Tobacco stunt varicosavirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Ca.
Tomato bushy stunt tombusvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Nc.
Tomato leaf curl begomovirus - Australia*	Tests that would detect this virus are already being conducted elsewhere in this schedule e.g. the universal PCR or ELISA for begomovirus.
Tomato top necrosis nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Cq.
Tomato yellow vein streak begomovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the universal PCR or ELISA for begomovirus.
Peanut witches' broom*	Tests that would detect this phytoplasma are already being conducted elsewhere in this schedule, e.g. the universal PCR for phytoplasma.

#### **Notes:**

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. Plantlets in growth medium must be de-flasked and grown in quarantine for the completion of pre-determined testing; however, the 'Inspection and Testing Requirements' may also require the plantlets to be grown on specific medium for bacteria testing. After plantlets are deflasked they must be grown in sterile potting mix. Testing must be carried out on plants while they are still in active growth prior to tuber formation.
- 3. Herbaceous indicator hosts (**Cq** *Chenopodium quinoa*, **Nd** *Nicotiana 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)
s, (21.pozez o mine dio muneo)
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 - <a href="https://www.biosecurity.govt.nz/dmsdocument/1152">https://www.biosecurity.govt.nz/dmsdocument/1152</a> <a href="https://www.biosecurity.govt.nz/dmsdocument/1152">https://www.biosecurity.govt.</a>
(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.

I, (Importer's name and address)		
1, (Importer 8 name and address)		
declare to the best of my knowledge that according to the Standard (MPI Import Health Standard: <a href="https://www.biosecurity.govt.nz/dmsdocument/1152-Nur">https://www.biosecurity.govt.nz/dmsdocument/1152-Nur</a>	155.02.06: Importation of Nursery Stock	
(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 date	Signed by <b>Importer</b> and Company Name (details) and date	

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.

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* 

*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

PEO: 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 not 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 PEQ greenhouse</u>, 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

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:

PEO: Level 2

**Minimum Period**: 3 months

Additional Declaration: "The plants were inspected during the growing season and no

symptoms of viruses or virus-like diseases were detected".

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

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

#### **PLUS**

#### **Additional Declaration:**

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

Tillandsia

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under **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* 

*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** 

*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."

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under

**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.

**Tulipa** 

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

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

Dormant bulbs

Plants in tissue culture

### 2. Pests of Tulipa

Refer to the pest list.

### 3. Entry conditions for:

# 3.1 Tulipa dormant bulbs from the Netherlands

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required. **Import permit:** no import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

### The *Tulipa* dormant bulbs have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

### **AND**

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

### **AND**

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

#### **AND**

- sourced from a 'pest free area', 'pest free place of production' or 'pest free production site', free from regulated bacteria and viruses.

### **AND**

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

### **AND**

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

# (iii) Additional declarations to the phytosanitary certificate

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

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

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

#### **AND**

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

### **AND**

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

### (iv) Post-entry quarantine

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

# 3.2 Tulipa 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 *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) <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 *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 nematodeParatrichodorus teresstubby root nematodeTrichodorus similisstubby 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 perniciosumsmoulderSclerotium wakkeriblackleg

### **Bacterium**

### Corynebacteriaceae

Curtobacterium flaccumfaciens pv. oortii yellow pock

### Virus

Cymbidium ringspot virus

Tobacco rattle virus [strains not in New Zealand]

Tomato bushy stunt virus

Tomato ringspot virus

Tulip grey virus (syn. Tulip severe mosaic virus)

Tulip halo necrosis virus

Tulip mild mosaic virus

Tulip mild mottle mosaic virus

Wa tulip virus

-

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

### **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Ceratocystis fimbriata, Elm mosaic virus, Elm phloem necrosis, Phellinus noxius, Phytophthora ramorum, Xylella fastidiosa

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

### A. For Whole Plants

PEQ: Level 3B

Minimum Period: 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <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* 

Vaccinium

**Note:** The entry conditions in 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) <u>Documentation</u>

**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) <u>Special tissue culture media requirements</u> 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) *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 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) <u>Additional declarations to the phytosanitary</u> 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*".

(iv) <u>Special tissue culture medium requirements</u> 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 fourweek 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

Ob area amon

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 lituragooseberry sawflyPristiphora idiotawillow redgall sawfly

Pristiphora mollis -

Lepidoptera Arctiidae

Hyphantria cunea fall webworm

Geometridae

Itame ribearia currant spanworm

Noctuidae

Acronicta tritonaacronicta caterpillarActebia fennicablack army cutworm

Notodontidae

Datana major azalea caterpillar

**Pyralidae** 

Acrobasis vaccinii cranberry fruitworm

Sphingidae

Paonias astylus huckleberry sphinx

Tortricidae

Archips rosanusrose leafrollerArgyrotaenia velutinanared-banded leafroller

Aroga trialbamaculella leaftier

Cheimophila salicella European carnation tortrix

Choristoneura hebenstreitella tortricid

Choristoneura rosaceana oblique-banded leafroller

Cydia packardi cherry fruitworm

Dichomeris vacciniella leaftier

Hendecaneura shawianablueberry tip borerSpilonota ocellanaeyespotted bud moth

Thysanoptera Thripidae

Catinathrips similisthripsCatinathrips vaccinicolathripsFrankliniella bispinosaflower thrips

Frankliniella tritici eastern flower thrips
Frankliniella vaccinii blueberry thrips

Scirtothrips ruthveni -

Taeniothrips vaccinophilus thrips

Mite

Arachnida

Acarina

Eriophyidae

Acalitus vaccinii blueberry bud mite

Fungus

Ascomycota

Diaporthales

Valsaceae

Diaporthe vaccinii (anamorph Phomopsis vaccinii) twig blight

**Dothideales** 

Botryosphaeriaceae

Botryosphaeria corticis cane blight

Botryosphaeria vaccinii (anamorph Phyllosticta elongata)--

Polystomellaceae

Dothidella vacciniicola twig canker

Erysiphales Erysiphaceae

Microsphaera vaccinii powdery mildew

Hypocreales Hypocreaceae

Calonectria ilicicola (anamorph Cylindrocladium root and stem rot

crotalariae)

Leotiales

Leotiaceae

Godronia cassandrae (anamorph Fusicoccum foliage spot

putrefaciens)

Godronia cassandrae f. sp. vaccinii cane canker

Sclerotiniaceae

Monilinia baccarummummy berryMonilinia fructigena (anamorph Monilia fructigena)European brown rot

Monilinia ledi twig blight

Monilinia megalospora Monilinia oxycocci -

Monilinia urnulabrown rotMonilinia vaccinii-corymbosibrown rot

Phyllachoraceae Phyllachoraceae

fly speck leaf spot Ophiodothella vaccinii

Meliolales

Meliolaceae

black mildew Asteridiella exilis

**Rhytismatales** Rhytismataceae

Lophodermium hypophyllum

Lophodermium maculare leaf spot Rhytisma vaccinii tar leaf spot

**Basidiomycota: Basidiomycetes** 

Agaricales

Tricholomataceae

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

**Exobasidiales** 

Exobasidiaceae

Exobasidium maculosum **Basidiomycota: Teliomycetes** 

**Uredinales** 

Pucciniastraceae

Pucciniastrum goeppertianum rust

**Oomycota Pythiales** Pythiaceae

Phytophthora ramorum sudden oak death disease

mitosporic fungi (Coelomycetes)

**Sphaeropsidales** Sphaerioidaceae

> Dothichiza caroliniana double leaf spot Coniothyrium vaccinicola brand canker Phoma vaccinii stem blight Piggotia vaccinii leaf spot Septoria albopunctata septoria spot Septoria vaccinii septoria spot

unknown Coelomycetes unknown Coelomycetes

leaf spot and stem canker Gloeosporium minus

Leptothyrium conspicuum fly speck

mitosporic fungi (Hyphomycetes)

Hyphomycetales Moniliaceae

> leaf spot Gloeocercospora inconspicua Ramularia vaccinii leaf spot

unknown Hyphomycetes unknown Hyphomycetes

> Aureobasidium vaccinii twig and leaf blight

**Bacterium** 

Burkholderiaceae

Bacterial wilt Ralstonia pseudosolanacearum

(formerly Ralstonia solanacearum race 1, Phylotype I)

Pseudomonadaceae

Xylella fastidiosa Pierce's disease

Rhizobiaceae

Agrobacterium rubi	cane gall
Virus	
Blueberry leaf mottle virus	-
Bluberry red ringspot virus (syn. Cranberry ringspot	-
virus)	
Blueberry scorch virus	-
Blueberry shock virus	-
Blueberry shoestring virus	-
Peach rosette mosaic virus	-
Tobacco streak virus [strains not in New Zealand]	-
Tomato ringspot virus	-
Phytoplasma	
Blueberry stunt phytoplasma	-
Cranberry false blossom phytoplasma	-
Vaccinium witches' broom phytoplasma	-
Disease of unknown aetiology	
Blueberry fruit drop disease	-

# Inspection, Testing and Treatment Requirements for Vaccinium

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
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 <b>or</b> 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 (formerly R. solanacearum race 1)	Growing season inspection in PEQ for disease symptom expression,  AND plating on selective media or PCR using DNA from plant stem
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression <b>AND</b> 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
Tobacco streak virus [strains not in New Zealand]	Herbaceous indicators Cq and Nt AND ELISA or PCR
Tomato ringspot virus	Herbaceous indicators Cq and Nt AND ELISA or PCR
Phytoplasmas	
Blueberry stunt phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers
Cranberry false blossom phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers
Vaccinium witches' broom phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers
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.

**Note:** The entry conditions in 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) <u>Special tissue culture media requirements</u> The tissue culture media must not contain charcoal.

### (v) Post-entry quarantine

**PEQ**: All *Vaccinium macrocarpon* nursery stock must be imported under permit into postentry 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) <u>Documentation</u>

**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 postentry 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

Rhabdopterus picipes cranberry rootworm

Curculionidae

Anthonomus musculus cranberry weevil

Pseudanthonomus validus currant fruit weevil

Scarabaeidae

Popillia japonica Japanese beetle

Diptera

Tephritidae

Rhagoletis pomonella apple maggot fly

Homoptera Aphididae

Aphis vaccinii blueberry aphid

Illinoia borealis aphid

Cicadellidae

Euscelis striatulus Blunt-nosed leafhopper

Hymenoptera Tenthredinidae

Pristiphora idiota willow redgall sawfly

Lepidoptera Arctiidae

Hyphantria cunea fall webworm

Geometridae

Itame ribearia currant spanworm

Noctuidae

Acronicta tritona acronicta caterpillar
Actebia fennica black army cutworm

**Pyralidae** 

Acrobasis vaccinii cranberry fruitworm

Tortricidae

Archips rosanus rose leafroller
Argyrotaenia velutinana red-banded leafroller

Aroga trialbamaculella leaftier Choristoneura hebenstreitella tortricid

Choristoneura rosaceana oblique-banded leafroller

Dichomeris vacciniella leaftier

Thysanoptera Thripidae

Frankliniella vaccinii blueberry thrips

Mite

Arachnida

Acarina

Eriophyidae

Acalitus vaccinii blueberry bud mite

Fungus Ascomycota **Diaporthales** 

Valsaceae

Diaporthe vaccinii (anamorph Phomopsis vaccinii) twig blight

**Dothideales** 

Botryosphaeriaceae

Botryosphaeria vaccinii (anamorph Phyllosticta

elongata)

**Erysiphales** 

Erysiphaceae

powdery mildew Microsphaera vaccinii

Leotiales

Leotiaceae

Godronia cassandrae (anamorph Fusicoccum foliage spot

putrefaciens)

Godronia cassandrae f. sp. vaccinii cane canker

Sclerotiniaceae

Monilinia fructigena (anamorph Monilia fructigena) European brown rot

Monilinia oxycocci

**Rhytismatales** 

Rhytismataceae

Lophodermium hypophyllum

Lophodermium maculare leaf spot

Lophodermium oxycocci

**Basidiomycota: Basidiomycetes** 

Agaricales

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha armillaria root rot

subcorticalis)

**Basidiomycota: Teliomycetes** 

**Uredinales** 

Pucciniastraceae

Pucciniastrum goeppertianum rust

Chytridiomycota Chytridiales Synchytriaceae

> Synchytrium vaccinii red leaf gall

Mitosporic fungi (Coelomycetes)

**Sphaeropsidales** Sphaerioidaceae

> brand canker Coniothyrium vaccinicola stem blight Phoma vaccinii Septoria vaccinii septoria spot Strasseria oxycocci fruit rot

unknown Coelomycetes

unknown Coelomycetes

leaf spot and stem canker Gloeosporium minus

Leptothyrium conspicuum fly speck

**Oomycota Pythiales Pythiaceae** 

Sudden Oak Death disease Phytophthora ramorum

**Bacterium** 

Pseudomonadaceae

Xylella fastidiosa

### Rhizobiaceae

Agrobacterium rubi

cane gall

Virus

Blueberry scorch virus

Bluberry red ringspot virus (syn. Cranberry ringspot

virus)

Tobacco streak virus [strains not in New Zealand]

Phytoplasma

Cranberry false blossom phytoplasma

# **Inspection, Testing and Treatment Requirements for** *Vaccinium macrocarpon*

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)	
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 <b>AND</b> 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.

Verbena

**Note:** The entry conditions in 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

PEO: 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 Uredinal	es	
	Additional declaration:	"Rust diseases are not known to occur on _	[the
	imported genus] in	[the country in which the plan	ts 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 not 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 greenhouse</u>, 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 Xylella fastidiosa"	Applies to whole plants, cuttings only. Testing requirements for <i>Xylella 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 Xylella fastidiosa are
Viroids		identified in section 2.2.2.5
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 Plants

PEO: 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 not recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note**: Only applies to members of the *Albizia* and *Cassia* genera AND the following species: *Agathis robusta*, *Celtis sinensis*, *Grevillea robusta*, *Hibiscus rosa-sinensis*, *Hibiscus schizopetalus*, *Hibiscus tiliaceus*, *Ilex rotunda*, *Lagerstroemia 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 greenhouse</u>, 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

**PEO:** Level 2

**Minimum Period:** 3 months

a.	Conditions for Uredinales	
	Additional declaration: "Rust diseases of genus Coleosporium and Cronatium a	are no
	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.

Vitis

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

1. Type of *Vitis* nursery stock approved for entry into New Zealand Cuttings (dormant); Plants in tissue culture

*Vitis* can be imported into Level 2 post entry quarantine from 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
- 2. 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) <u>Documentation</u>

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vitis* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

### (ii) *Phytosanitary requirements*

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

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

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

### **AND**

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

#### AND

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

# (iii) Additional declarations to the phytosanitary certificate

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

"The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been sourced from mother plants which are at least 10 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.

# Pest List for Vitis

# **REGULATED PESTS (actionable)**

Insecta Insecta

Coleoptera

Bostrichidae

Amphicerus bicaudatus Amphicerus bimaculatus

Amphicerus cornutus Apate congener

Apate monachus Bostrychopsis jesuita Dexicrates robustus apple twig borer bostrichid beetle

-

black borer large auger beetle

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Melalgus confertus branch and twig borer

Micrapate scabrata Neoterius mistax Psoa quadrisignata -

Schistocerus bimaculatusgrape cane borerScobicia declivislead cable borerXylopertha retusawood boring beetle

Xylopsocus gibbicollis -

Buprestidae

Agrilus marginicollis flatheaded grape borer

Carabidae

Adoxus obscurus [Animals Biosecurity] -

Cerambycidae

Acalolepta vastator -

Cerasphorus albofasciatus grape trunk borer

Chrysomelidae

Altica chalybaeagrape flea beetleAltica torquatagrapevine flea beetleBromius obscuruswestern grape rootwormFidia viticidagrape root worm

Fidia viticida grape root worm
Glyptoscelis squamulata grape bud beetle

Haltica spp.

Monolepta australis red-shouldered leaf beetle

Coccinellidae

Coccinella transversoguttata [Animals Biosecurity]

Midas pygmaeus [Animals Biosecurity]

Nephus reunioni [Animals Biosecurity]

Rhyzobius ruficollis [Animals Biosecurity]

Stethorus spp. [Animals Biosecurity]

Curculionidae

Bustomus setulosusbrown weevilCraponius inaequalisgrape curculioDischista cincnaflower beetleEremnus atratusblack weevil

Eremnus cerealis western province grain worm

Eremnus setulosusgrey weevilNaupactus xanthographusfruit tree weevilOrthorhinus cylindrirostriselephant 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 subspinosusrose chaferPachnoda sinuatascarab beetlePopillia japonicaJapanese beetleSchizonycha sp.cockchafer

Scolytidae

Scolytus japonicusJapanese bark beetleXyleborus disparambrosia beetleXyleborus semiopacusblack twig borer

Staphylinidae

Oligota pygmaea [Animals Biosecurity]

Tenebrionidae

Blapstinus sp. darkling beetle

Coniontis parviceps Metoponium abnorme -

**Diptera** 

Cecidomyiidae

Diadiplosis koebelei -

Tachinidae

Ollacheryphe aenea [Animals Biosecurity] Sturmia harrisinae [Animals Biosecurity] Voriella uniseta [Animals Biosecurity] -

Hemiptera Anthocoridae

Orius sp. [Animals Biosecurity]

Coreidae

Anthocoris sp. -

Mictis profana crusader bug

Lygaeidae

Nysius raphanusfalse chinch bugNysius vinitorRutherglen bugOxycarenus arctatuscoon bug

Miridae

Creontiades dilutus green mirid

Pentatomidae

Euschistus conspersus stink bug

Oechalia schellenbergi [Animals Biosecurity] Schellenberg's soldier bug

Pyrrhocoridae

Dindymus versicolor harlequin bug

Homoptera

Aleyrodidae

Aleurocanthus woglumi citrus blackfly

Tetraleurodes vittatus -

Trialeurodes vittata grape whitefly

**Aphididae** 

Aphis illinoisensis grapevine aphid

Aphis medicaginis -

Asterolecaniidae

Asterolecanium pustulans oleander pit scale

Cerococcidae

Asterococcus muratae pit scale

Cicadellidae

Acia lineatifrons leafhopper

Carneocephala fulgida red-headed sharpshooter

 Carneocephala fulgida [vector]
 red-headed sharpshooter

 Dikrella cockerellii
 blackberry leafhopper

 Draeculacephala minerva
 green sharpshooter

 Draeculacephala minerva [vector]
 green sharpshooter

 Empoasca sp.
 green leafhopper

Erythroneura comeseastern grape leafhopperErythroneura elegantulawestern grape leafhopperErythroneura variabilisvariegated grape leafhopper

Erythroneura ziczac -

Graphocephala atropunctata leafhopper

Graphocephala atropunctata [vector] blue-green sharpshooter

Hordnia circellata

Scaphoideus titanus [vector] raspberry leafhopper

Cicadidae

Platypedia minor Tettigades chilensis -

Coccidae

 Ceroplastes rusci
 fig wax scale

 Eulecanium cerasorum
 calico scale

 Eulecanium pruinosum
 frosted scale

 Heliococcus helomique
 scale

Heliococcus bohemicus scale

Parthenolecanium persicae European peach scale

Pulvinaria betulae scale

Pulvinaria innumerabiliscottony maple scalePulvinaria vitiswoolly vine scale

Diaspididae

Aonidiella inornatainornate scaleChrysomphalus aonidumFlorida red scaleDiaspidiotus uvaegrape scaleOceanspidiotus spinosusarmoured scaleParlatoria cinereachaff scaleParlatoria oleaeolive scale

Pinnaspis strachanihibiscus snow scalePseudaonidia trilobitiformistrilobite scalePseudaulacaspis pentagonawhite peach scaleQuadraspidiotus juglansregiaewalnut scale

Selenaspidus articulatus West Indian red scale

Margarodidae

Eurhizococcus brasiliensismargarodidIcerya seychellarumSeychelles scaleMargarodes capensisSeychelles fluted scale

Margarodes greeni soft scale

Margarodes meridionalis -

Margarodes prieskaensismargarodidMargarodes trimenimargarodid

Margarodes vitis -

Margarodes vredendalensis margarodid

Membracidae

Ceresa bubalus tree hopper

Spissistilus bisonia -

Spissistilus festinus three-cornered alfalfa hopper

Phylloxeridae

Viteus vitifoliae [strain] grape phylloxera

Pseudococcidae

Maconellicoccus hirsutus pink hibiscus mealybug

Planococcus ficus fig mealybug

Pseudococcus capensis -

Pseudococcus maritimusgrape mealybugRhizoecus kondonisKondo mealybug

Hymenoptera Aphelinidae

Coccophagus caridei [Animals Biosecurity] Coccophagus gurneyi [Animals Biosecurity] -

Bethylidae

Goniozus platynota [Animals Biosecurity] -

Braconidae

Apanteles harrisinae [Animals Biosecurity] -

Bracon cushmani [Animals Biosecurity] Dolichogenidea tasmanica [Animals Biosecurity] Drvinidae 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 cocktail ant Crematogaster peringueyi [Animals Biosecurity] Formica cinerea [Animals Biosecurity] ant Pogonomyrmex californica [Animals Biosecurity] California harvester ant Solenopsis xyloni [Animals Biosecurity] southern fire ant Veromessor pergandei [Animals Biosecurity] desert seed-harvester ant Ichneumonidae Campoplex capitator [Animals Biosecurity] Dicaelotus inflexus [Animals Biosecurity] Mymaridae Anagrus epos [Animals Biosecurity] Pteromalidae Ophelosia charlesii [Animals Biosecurity] Pachyneuron sp. [Animals Biosecurity] **Trichogrammatidae** Trichogramma funiculatum [Animals Biosecurity] Trichogrammatomyia tortricis [Animals Biosecurity] -Vespidae Polistes buysoni [Animals Biosecurity] Isoptera Kalotermitidae Cryptotermes brevis West Indian drywood termite Kalotermes flavicollis termite Kalotermes minor Neotermes chilensis termite Rhinotermitidae Coptotermes acinaciformis [official control] Australian subterranean termite Reticulitermes hesperus Termopsidae Porotermes quadricollis Lepidoptera Agaristidae painted vine moth Agarista agricola Heraclia superba grapevine zebra moth Arctiidae Estigmene acrea saltmarsh caterpillar Hyphantria cunea fall webworm Laora variabilis Spilosoma virginica yellow woollybear Turuptiana obliqua tiger moth

Cossidae

Coryphodema tristis quince trunk borer Zeuzera coffeae red coffee borer

Heliozelidae

Antispila rivillei

Noctuidae

Achaea spp.fruit-piercing mothsAgrotis mundabrown cutwormAlabama argillaceacotton leafwormAnomis mesogonahibiscus looper

Anomis spp. -

Calyptra spp.fruit-piercing mothsCopitarsia consuetanoctuid mothEudocima spp.fruit-piercing mothsEuxoa messoriadarksided cutwormEuxoa ochrogasterredbacked cutwormHelicoverpa punctigeraoriental tobacco budworm

Mythimna sp.

Noctua fimbriata broad-bordered yellow underwing

Noctua pronuba large yellow underwing Oraesia spp. fruit-piercing moths

Orthodes rufula cutworm

Peridroma margaritosa

Peridroma saucia variegated cutworm

Protorthodes rufula -

Serrodes spp. fruit-piercing moth

Sphingomorpha spp.

Spodoptera littoraliscotton leafwormXestia c-nigrumspotted cutworm

Oecophoridae

Echiomima sp. -

Maroga melanostigma fruit tree borer

**Psychidae** 

Gymnelema plebigena bagworm

Pterophoridae

Geina periscelidactylus -

Pvralidae

Desmia funeralis grape leaf-folder Euzophera bigella quince moth

Ostrinia nubilalis European corn borer

Saturniidae

Hemileuca eglanterinabrown day-mothHyalophora cecropiacecropia moth

Sesiidae

Vitacea polistiformis grape root borer

**Sphingidae** 

Eumorpha achemonachemon sphinxHippotion celeriograpevine hawk mothHyles euphorbiaespurge hawk mothHyles lineatawhitelined sphinxTheretra capensisgrapevine hawk mothTheretra oldenlandiaevine hawk moth

Tortricidae

Archips argyrospilus fruit tree leafroller Argyrotaenia citrana orange tortrix

Argyrotaenia ljungianagrey red-barred tortrixArgyrotaenia velutinanared-banded leafrollerCryptophlebia leucotretafalse codling moth

Endopiza viteana -

Eulia stalactitis -

Eupoecilia ambiguellavine mothLobesia botranagrape berry mothParalobesia viteanagrape berry mothPlatynota stultanaomnivorous leafrollerProeulia aurariagrapevine leafroller

Proeulia triqueta -

Zygaenidae

Harrisina americana grapeleaf skeletonizer

Harrisina brillians western grapeleaf skeletonizer

Theresimima ampelophaga zygaenid butterfly

Neuroptera Chrysopidae

Chrysopa oculata [Animals Biosecurity] - Chrysopa spp. [Animals Biosecurity] -

Coniopterygidae

Cryptoscenea australiensis [Animals Biosecurity]

Hemerobiidae

Micromus sp. [Animals Biosecurity] -

Orthoptera Acrididae

Melanoplus femurrubrum red-legged grasshopper

Melanoplus mexicanus devastator -

Oedaleonotus enigma -

Phaulacridium vittatum wingless grasshopper

Schistocerca cancellata Schistocerca shoshone Schistocerca vaga -

Gryllidae

Acheta fulvipennis cricket
Microgryllus pallipes cricket

Tettigoniidae

Caedicia spp. -

Plangia graminea grasshopper

Thysanoptera Phlaeothripidae

Haplothrips victoriensis tubular black thrips

**Thripidae** 

Caliothrips fasciatusbean thripDrepanothrips reuterigrape thripsFrankliniella cestrumtomato thripsFrankliniella minutaminute flower thrips

Frankliniella occidentalis [pesticide resistant strain] western flower thrips
Heliothrips sylvanus thrips

Rhipiphorothrips cruentatus leaf thrips Scirtothrips citri citrus thrips

Scolothrips sexmaculatus [Animals Biosecurity]

Unknown Insecta Unknown Insecta

Cryptolarynx vitis Dyctineis pulvinosus -

Mite

Arachnida

Acarina

Anystidae

Anystis agilis [Animals Biosecurity]

Eriophyidae

Colomerus vitis [leaf curling strain] grape erineum mite Phyllocoptes vitis eriophyid mite

Phytoseiidae

Amblyseius victoriensis [Animals Biosecurity] Metaseiulus occidentalis [Animals Biosecurity] -

Neoseiulus chilenensis [Animals Biosecurity] predator mite

Typhlodromus doreenae [Animals Biosecurity]

Tenuipalpidae

Brevipalpus chilensisfalse spider miteBrevipalpus lewisibunch miteBrevipalpus liliumfalse spider miteBrevipalpus obovatusprivet miteTenuipalpus granatifalse spider mite

Tetranychidae

tetranychid mite Eotetranychus carpini Eotetranychus pruni hickory scorch mite tetranychid mite Eotetranychus smithi Eotetranychus viticola tetranychid mite Eotetranychus willamettei hazel mite Yumi spider mite Eotetranychus yumensis Eutetranychus orientalis pear leaf blister mite Oligonychus coffeae tea red spider mite mango spider mite Oligonychus mangiferus

Oligonychus peruvianus spider mite

Oligonychus punicaeavocado brown miteOligonychus yothersiavocado red miteTetranychus kanzawaikanzawa mite

Tetranychus mcdanieliMcDaniel spider miteTetranychus pacificusPacific spider mite

Mollusc

Gastropoda

Stylommatophora

Helicidae

Cernuella virgatasmall banded snailsCochlicella barbarasmall pointed garden snail

Theba pisana white Italian snail

**Fungus** 

Ascomycota

**Caliciales** 

**Unknown Caliciales** 

Roesleria pallida grape root rot

Diaporthales Valsaceae

Diaporthe rudis (anamorph Phomopsis rudis) phomopsis canker

**Dothideales** 

Mycosphaerellaceae

Guignardia bidwellii (anamorph Phyllosticta ampelicida) black rot

Guignardia bidwellii f. sp. euvitis Guignardia bidwellii f. sp. muscadinii -

Mycosphaerella angulata (anamorph Cercospora angular leaf spot

brachypus)

Schizothyriaceae

Schizothyrium pomi (anamorph Zygophiala jamaicensis) fly speck

Hypocreales

Hypocreaceae

Cylindrocarpon destructans var. crassum root rot Leotiales Dermateaceae Pseudopezicula tetraspora angular leaf scorch Pseudopezicula tracheiphila rotbrenner Sclerotiniaceae Grovesinia pyramidalis (anamorph Cristulariella target spot *moricola*) **Rhytismatales** Rhytismataceae Rhytisma vitis tar spot Saccharomycetales Saccharomycetaceae Pichia membranaefaciens **Unknown Ascomycota** Hyponectriaceae Physalospora baccae **Xylariales** Xvlariaceae Brulure Anthostomella pullulans **Basidiomycota: Agaricomycetes** Hymenochaetales Hymenochaetaceae Phellinus noxius brown root rot **Basidiomycota: Basidiomycetes** Agaricales Tricholomataceae Armillaria mellea (anamorph Rhizomorpha subcorticalis) armillaria root rot armillaria root rot Armillaria sp. 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 wood decay Pleurotus ostreatus Stereales Stereaceae Stereum sp. **Basidiomycota: Teliomycetes Uredinales Unknown Uredinales** Physopella ampelopsidis grape rust Mitosporic Fungi Unknown Mitosporic Fungi Unknown Mitosporic Fungi Phacellium sp. Mitosporic Fungi (Coelomycetes) **Sphaeropsidales** 

Coniella diplodiellawhite rotConiella petrakiiwhite rotPhomopsis longiparaphysataphomopsis rot

leaf spot

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**Sphaerioidaceae** Ascochyta ampelina Pyrenochaeta vitis leaf spot

Septoria ampelina septoria leaf spot

Unknown Coelomycetes
Unknown Coelomycetes

Nattrassia toruloidea leaf spot Pestalotia menezesiana fruit rot

Pestalotia pezizoidesfruit and leaf spotPestalotiopsis mangiferaegrey leaf spot of mango

Pestalotiopsis uvicola fruit rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales Dematiaceae

Alternaria vitis leaf disease

Phaeoramularia dissiliens cercospora leaf spot

Moniliaceae

Cephalosporium sp. --

Penicillium aurantiogriseum penicillium rot

Verticillium heterocladum -

**Unknown Hyphomycetes** 

**Unknown Hyphomycetes** 

Briosia ampelophaga leaf blotch Candida krusei yeasty rot

Candida steatolytica [Animals Biosecurity] -

Oidium sp. powdery mildew

Paecilomyces farinosus-Paecilomyces spp.-Phaeoacremonium aleophilum-Phaeoisariopsis sp.-

Stigmina vitis leaf fall

**Bacterium** 

Pseudomonadaceae

Xanthomonas campestris pv. viticolabacterial cankerXylella fastidiosaPierce's diseaseXylophilus ampelinusbacterial blight

Rhizobiaceae

Agrobacterium rubi cane gall

Virus

Artichoke Italian latent virus Cherry leaf roll virus [strains not in New Zealand] Grapevine Ajinashika disease virus Grapevine Algerian latent virus Grapevine Anatolian ringspot virus Grapevine angular mosaic virus Grapevine berry inner necrosis virus Grapevine Bulgarian latent virus Grapevine chrome mosaic virus Grapevine deformation virus Grapevine fanleaf virus [strains not in New Zealand] Grapevine labile rod-shaped virus *Grapevine leafroll-associated virus* [type 7] Grapevine line pattern virus Grapevine pinot gris virus Grapevine red blotch-associated virus Grapevine stunt virus Grapevine Tunisian ringspot virus

Grapevine virus D
Peach rosette mosaic virus
Petunia asteroid mosaic virus
Raspberry ringspot virus
Sowbane mosaic virus
Strawberry latent ringspot virus [strains not in New Zealand]
Tomato ringspot virus

#### Viroid

Australian grapevine viroid
Grapevine yellow speckle viroid 2

# Phytoplasma

Australian grapevine yellows phytoplasma
Grapevine bois noir phytoplasma
Grapevine flavescence doree phytoplasma
Grapevine yellows
Palatine grapevine yellows
Tomato big bud phytoplasma
Vergilbungskrankheit (German grapevine yellows)

#### Diseases of unknown aetiology

Grapevine vein clearing
LN33 stem grooving
Syrah decline

# Inspection, Testing and Treatment Requirements for Vitis

MPI-ACCEPTED METHODS (See notes below)
Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] or binocular microscope inspection in PEQ [plants in tissue culture only]
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) <b>AND</b> plating on potato dextrose agar  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 <b>AND</b> Hot water treatment (Refer to "Approved Treatments for <i>Vitis</i> ")
Growing season inspection in PEQ for disease symptom expression <b>AND</b> Hot water treatment (Refer to "Approved Treatments for <i>Vitis</i> ")
Growing season inspection in PEQ for disease symptom expression <b>AND</b> Hot water treatment (Refer to "Approved Treatments for <i>Vitis</i> ")
Growing season inspection in PEQ for disease symptom expression <b>AND</b> PCR (two sets, samples to be collected at least four weeks apart) <b>AND</b> Hot water treatment (Refer to "Approved Treatments for <i>Vitis</i> ")
Growing season inspection in PEQ for disease symptom expression
ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
Growing season inspection in PEQ for disease symptom expression
Growing season inspection in PEQ for disease symptom expression
Growing season inspection in PEQ for disease symptom expression
Growing season inspection in PEQ for disease symptom expression
Growing season inspection in PEQ for disease symptom expression
Herbaceous indicators (Ca and Cq)
Herbaceous indicators (Ca, Cq, Cs and Nt)
Herbaceous indicators (Ca and Cq)
ELISA or PCR AND herbaceous indicators (Ca, Cq, and Cs)
Growing season inspection in PEQ for disease symptom expression
PCR
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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 [strains not in New Zealand]	PCR AND herbaceous indicators (Ca, Cq and Cs)
Tomato ringspot virus	ELISA or PCR AND herbaceous indicators (Ca and Cq)
Viroids	Growing season inspection in PEQ for disease symptom expression
Phytoplasmas	Plants derived from cuttings: Nested PCR or real-time PCR using universal phytoplasma primers AND Hot water treatment (Refer to "Approved Treatments for <i>Vitis</i> ")  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)
Diseases of unknown aetiology	
Grapevine vein clearing	Growing season inspection in PEQ for disease symptom expression
LN33 stem grooving	Woody indexing or green indexing (LN33)
Syrah decline	Additional declaration endorsed on the phytosanitary certificate, refer to section 3.1 (iii) for offshore MPI-approved facilities or 3.2 (iii) for nonapproved facilities.

#### **Notes:**

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. Herbaceous indicator hosts (**Ca** *Chenopodium amaranticolor*, **Cq** *Chenopodium quinoa*, **Cs** *Cucumis sativus* and **Nt** *Nicotiana tabacum*): at least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season's growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
- 3. Woody or green indexing: at least two plants of each woody/green indicator must be used in each test. All woody indicators are to be inoculated by double budding while green indicators are top grafted. A suitable positive control must be included.
- 4. Enzyme linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) tests for viruses. Tests must be completed at the optimal time for detection. In general, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.
- 5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
- 6. Inspect *Vitis* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
- 7. With prior notification, MPI will accept other internationally recognised testing methods.

# **Approved Treatments for Vitis**

#### **Hot Water Treatment**

The consignment must be treated using hot water treatment (dipping), for the eradication of phytoplasmas and fastidious vascular prokaryotic organisms, as follows:

- 1. Cuttings with good hydration and reserves are stored in a cool room (~ 4°C). Before treatment, the dormant material must be held at room temperature for one day (24 hours).
- 2. For the treatment, the dormant material must be dipped into the hot water at 50°C for 45 minutes or at 45°C for 3 hours (FAO/IBPGR Technical Guidelines for Safe Movement of Grapevine Germplasm, 1990, Martelli G.P and Walter B. Virus Certification of Grapevines. In Plant Virus Disease Control, edited by A. Hadidi, RK Khetarpal and H Koganezawa. APS Press 1998). The water bath must have a moving system to homogenize the temperature and a precise control system to monitor the temperature at 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) <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>Special tissue culture media requirements</u> 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.

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

# (iv) Additional declarations to the phytosanitary certificate

No additional declarations are required.

# (v) Post-entry quarantine

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

# Pest List for Wollemia nobilis

# **REGULATED PESTS (actionable)**

**Fungus** 

Ascomycota

**Dothideales** 

Botryosphaeriaceae

Botryosphaeria spp.

Oomycota

**Pythiales** 

**Pythiaceae** 

Phytophthora cinnamomi

black rot

Arbuscular mychorrhizae

All regulated species

Ectomycorrhizae

All regulated species

**Note:** The entry conditions in 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) <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>Special tissue culture media requirements</u> The tissue culture media may contain charcoal.

# (iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry 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

# **REGULATED PESTS (actionable)**

Nematode

Secernentea

**Tylenchida** 

Meloidogynidae

Meloidogyne arenaria

peanut root knot nematode

**Fungus** 

**Basidiomycota: Basidiomycetes** 

**Agaricales** 

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha subcorticalis) armillaria root rot

**Oomycota** 

**Pythiales** 

Pythiaceae

Phytophthora richardiaerhizome and root rotPythium aphanidermatumcottony 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."